

THE
CHICAGO MEDICAL
JOURNAL & EXAMINER.

VOL. XLVI.—JUNE, 1883.—No. 6.

Original Communications.

ARTICLE I.

WHAT IS DISEASE? BY PROF. W. GODFREY DYAS, F. R. C. S.
(Inaugural Address delivered at the Woman's Medical College,
October, 1878.)

On an occasion like this, it may be expected that I should formally inaugurate the course, by a history of the rise and progress of medical science; range through, from remote periods, the intervening space to the present; detail views long since abandoned, and which have given place to others destined to share the same fate;—that I should traverse regions of error, unilluminated by a single ray of collateral science, and having toiled through the literary desert, felicitate myself that I had at length reached a point where sterility and darkness gave way to the gradual but steady unfolding of truth, as read in the bright light of day. But, even if my inclination prompted the inquiry, it would not be consistent with the plan I propose to pursue, which necessarily restricts me in the choice of my materials; nor would it conduce

to your interests, which may be much better served than by an enumeration of unprofitable theories. Yet I do not intend to say that an investigation of this kind would be wholly devoid of interest to those who have time and leisure to indulge in the review of past opinions, nor to affirm that many a literary gem may not reward a search among even the rejected matter and rubbish of our predecessors. The question which now, at the very threshold of a year of literary labor, chiefly interests us, is one upon the correct answer to which, much of your future success will depend. It involves principles of the deepest importance to you, when you become practitioners, and to your patients in their relation to you in that capacity, and it is one on which you should have well defined opinions, before you presume to deal with it practically. What is disease? is the subject of our inquiry. Is it an entity, superadded to the organism, and interfering with its normal functions? Or is it an effort at restoration of impeded or deranged functions, with a tendency to be salutary? Should the organism be capable of maintaining its conditions for existence during a rough, but well-meant intervention? Or is it simply a phase of life; is it the complement which, with what we call health, makes up and completes the idea of life? Should we adopt the first view, we look on disease as merely something that preys upon the organism, which, in that case, would be restored to its pristine health if this enemy were removed; and hence, we have numberless popular expressions based on this supposition, which doubtless emanated from our profession. This was the prevailing opinion. Subsequently, a more correct view was entertained. It consisted in looking on the morbid phenomena as the vital expressions of suffering organism; the result of a vital reaction to the injury sustained, and hence it was inferred that the duty of the physician was to assist this vital reaction, and aid it as a normal and physiological action. This theory embodied some truth, but the inference deduced was faulty. The first theory led to the employment of powerful measures, often more detrimental than the disease which they were intended to combat. The second favored an encouragement of disease. If, then, we wish to get a correct view of disease, we must look at it and health as two separate phases of the phenomena we term life;

and we must consider the relations that always exist between living organized bodies, and the agents which influence them in the manifestation of these phenomena.

As we proceed from the simplest to the most complicated organization, the susceptibility to the action of a stimulus is the cause of living action, through all the states of animal life. It is simply a mode of being of matter, depending on the placing of molecules in certain relative positions. It is not necessarily dependent on the agency of a nervous system; we see it in animals in which such a system does not exist. We see it present itself under various forms, as regards muscle, gland or nerve, each receiving an impression when subjected to a suitable stimulus. In the more elaborate organisms, we observe a coördination of these several impressions, uniting them in consent and accordance, principally, if not altogether, through the intervention of a nervous system, and forming, as it were, one consentient whole of the several and apparently dissimilar organs. So long as, during the never-ceasing change of the molecules of matter, vital reactions take place with ease and accuracy, there is health; the moment they cease to observe conformity to the laws of their existence (which are as much impressed on them as the attraction of gravity on dead or inorganic matter), and that they are marked by want of exactness, owing to the action of abnormal stimuli, there is disease. Beyond this, we cannot carry our inquiries. It is idle to attempt to reason as to the determining causes of these actions. They lie far beyond the range of human contemplation. The several stimuli themselves are subordinated to our reason. On them, we may legitimately speculate.

Heat, air and aliment—the necessary stimuli in the production of living actions, may range within variable, yet, as regards individual organizations, certain bounds, consistently with health. Beyond these, they give rise to a manifestation of a more prolonged and intensive series of changes, with a view to the maintenance of the well-being of the organism under the superinduced and novel condition. These changes, then, constitute what we call disease. They tend to the restoration of health, and only fail from the powers of the organism being inadequate to the completion of the necessary cycle of organic changes. Under

these circumstances, the duty of the physician is twofold. On the one hand, he has to maintain the powers of the organism; on the other, to modify the newly developed process of nature. His capability of effecting the former cannot be disputed. It is a matter of daily observation, proved by supplying or withholding the normal stimuli necessary to the continuance of the several functions. But can we modify a newly developed process of nature? Analogy would lead us to suppose so; for as nature, under its other numerous phases, admits of modification at the hands of art, it is reasonable to infer it may not find an exception in not being amenable to our art, when under the well-directed and skillful guidance of science. Besides, what reason in this respect suggests, seems confirmed by the daily experience of the profession in the action of certain medicines, whose efficacy is incontrovertibly established. None can question the efficacy of quinine in malarious disease, nor of mercury and iodide of potash. It is true, that in some diseases our efforts are restricted within narrower limits. In the specific fevers, for instance, that run a definite course, we have little else to do than, as Watson expresses it, "to see that nature has fair play, to redress some untoward deviations from the regular course, or to facilitate and fortify the natural recuperative efforts." Yet, in fulfilling these general indications, we may materially contribute to a favorable result, by subduing the morbid temperature through the medium of cold applied generally and locally, and by sedative doses of quinine and bromide of potassium.

Whilst thus glancing at that part of medicine termed therapeutics, I cannot avoid acknowledging how defective it is, when compared with our diagnosis and prognosis of disease, notwithstanding all the time and learning that have been bestowed in the discovery and application of remedies. Yet, on reflection, we cannot help seeing that, from the very nature of the subject, it cannot be otherwise. In dealing with it we have not, as in the diagnosis of a case, an assemblage of signs and symptoms to estimate individually and in combination, and compare together, supported as they are by a knowledge of morbid anatomy and pathology. On the contrary, to a great extent, we must be content to glean in the field of empiricism, where, though the labor-

ers are many, their capacities for judging of the materials they gather, differ as much as the minds and dispositions they bring to the task. Again, whilst administering medicines for some particular malady, complications previously latent will come to the surface, frequently, it may be, developed by our well-meant efforts to remove the original disease, and give rise to more serious morbid phenomena than those they were intended to combat ; thus leading us astray in regard to the efficacy of the means we use. Besides, the features of a disease are constantly varying, those of any two cases never being exactly alike, and thus we never, in any two consecutive cases, apply our remedies under precisely the same conditions. Another source of error in therapeutics, must be attributed to the loose mode in which we daily express ourselves, using terms that imply our acquiescence in theories, some long since exploded, and others, though still entertained, yet having no real foundation either in facts or sound deduction. We speak of the elimination of poison, and the purifying effects of certain remedies ; and if we limit these terms to operations on the organism, where mineral poisons are in question, I will not dispute the propriety of the language used. But I deny that it is suitable when applied to diseases that result from organic poisons. In this latter case, a permanent effect has been left, that militates with the notion that a something has been removed, leaving the organism as it was before—as if simply a poison had been cast out. Again, we read of zymotic diseases. This dogma of zymosis rests on uncertain grounds. A zymotic disease is one supposed to be produced by some morbid principle acting on the system as a ferment. Do we see in the phenomena of fever anything characteristic of fermentation ? Certainly not. Besides, the theory is based on the assumption that the first morbid movement in fever commences in the blood. It may be so. But where is the proof ? In such cases, the first intimation of perverted function is supplied by the nervous system. When we speak of the initial chill of fever, we use correct language ; we thus express the disturbed function of the nervous centers, that ushers in the sequence of morbid and specific processes that constitute the disease.

But, though I acknowledge therapeutics to be the most vulnerable point of our position, yet let me not be supposed to have any intention of conveying the false notion, that the diagnosis of disease is brought to perfection. That would imply a perfect physiology, and still more a pathology as well established as a fixed science. These desiderata, I need scarcely say, are unattainable. In some forms of disease, where we have physical signs coming to the aid of symptoms; where, in a word, the subjective and the objective are conjoined, as in affections of the lungs and heart, we have unusual facilities, when guided by a ripe experience and sound judgment, to form a creditable and satisfactory diagnosis. The same observation will justly apply to certain instrumental appliances which we have more recently availed ourselves of, to aid us in our researches. The sphygmograph, the laryngoscope, the aspirator, the thermometer, have now their place, and to considerable advantage, in the armamentarium of the practitioner. But, on the other hand, in other forms of disease, in cerebral affections, for instance, where we apparently have opposite conditions of a part, producing the same morbid phenomena, different lesions causing the same symptoms, the seat of disease being the same, we are compelled to acknowledge we have much still to learn, before we can in every case, with perfect satisfaction to ourselves, or the greatest amount of profit to our patients, proceed to treatment.

Whoever, for a moment, considers the varying and uncertain estimation in which remedial means are from time to time held, will hesitate to give his adhesion to views in connection with them, merely because their employment is due to the capricious taste of the day. He must examine for himself, as well as entertain the suggestions of authority, uninfluenced by the ruling of any arbitrary and passing fashion; and he must endeavor, in each case, to refer their action to some sound scientific principle. And now, before I proceed further, let me impress on you the fact, that anything in our profession that is not based on science, must be received with suspicion. I do not mean to say, that I would reject a remedy, the undoubted efficacy of which our individual experience and that of others testify to, until we can satisfactorily and on scientific grounds receive it, until, in short,

we can place it in a suitable niche in the temple of science. Nor should we ignore morbid manifestations as signs and symptoms of disease, until we can interpret them according to the notions of our philosophy, and the doctrines of our schools. But on the other hand, we must guard against a facile assent to new views not in accordance with science—often in positive opposition to its teachings. We must avoid being “carried about by every wind of doctrine.” At all times in our profession, as well as in concerns of more momentous import, innovations, “falsely termed science,” have crept in, which have charmed, by their novelty, half-educated people, whose erudition, scanty and slender at the best, was not directed by a sound or logical mind. For the most part their success has been fleeting and evanescent, scarcely surviving the term of their novelty. Other fallacies have, however, for a longer time succeeded in enchaining the minds of men, introduced as they have been, with all the circumstances of plausible argument, and the semblance of being reduced to a principle. The most noted of these owes its importance to an apostate member of our profession, who, being in his early days unsuccessful in practice, revived a dogma that had been enunciated and maintained in the 6th century by Gregory the Great. The dogma *similia similibus curantur* therefore lacks even the quality of novelty. This exploded tenet—this fallacy of ungrounded persuasions can easily be discovered and unmasked by the enquiry of a mind of even moderate comprehension, and can be exposed as either a miserable delusion or a culpable imposition. The advocates of orthodox medicine do not mean to assert that their own system is free from defects, but they do not hesitate to state that they rest its merits on the broad basis of acknowledged science. It is not cramped by any spurious doctrine, but invokes the aid of all knowledge, whether obtruse or obvious, and owing to this it has had the sanction of the learned for centuries.

For didactic purposes it has always been desirable to have some system of nosology. Distinguished physicians have at different times laid down systems, so-called, of disease all of which have by their successors been found defective and have been replaced by others not more fortunate in securing the favor

of the profession. When you consider the basis on which each system was raised ; that such was in accordance with the received opinions of the day in regard to science, and that this in every department was undergoing modification from additional light shed on it, you cannot expect that the superstructure could remain together on a foundation so unstable. We cannot, nevertheless, dispense with order, and in furtherance of this we must have some system—some assemblage of the constituent parts of a subject into a general whole, wherein the connection or mutual dependencies may be seen without much effort of the understanding. With this view the best arrangement we can adopt will always be that founded on a physiological basis, in which the diseases of the respective functions of the animal frame are connected in classes derived from those functions, and follow each other in the order in which physiologists have usually treated of them. After all, Nature, infinitely varied, will not bend herself to an intelligence which can but assign bounds and make divisions. You cannot reunite the double advantage of requisite precision in details, and at the same time clear philosophical views as regards the several phenomena, morbid and normal of the organism. You may remark that in medical literature we draw largely on the Greek language for a nomenclature of medicine, and we assume that those who enter our profession have not only already had some acquaintance with the rudiments of the ancient classics but have acquired a competent knowledge of that branch of learning. I have often heard men—uneducated men, always—say, “What have the classics to do with the practice of medicine?” I would reply, certainly none directly—much, however, indirectly. And I take this opportunity to express my deep regret at the great falling off, of late, in the preliminary education of the alumni of our schools. To such an extent has this decadence of our profession been carried, that some of our graduates have been unable to translate their own diplomas, and that many cannot muster sufficient knowledge of their mother tongue to publish their cases. The time was when a physician from his superior education and resulting refinement, was the fit associate of all that were elevated in society ; the literary title affixed gave him access to and acceptance by those distinguished

by position and culture. Now the same title is often calculated to excite a smile, conferred as it is so frequently on men who are below the lowest grade of mechanics. The greatest evil to which, in the present day, our profession has been subjected, is the annual intrusion into its ranks of hordes of uncouth and uncultured persons. How far this disregard of preliminary education is beneficial to colleges or calculated to increase the fund from fees paid for diplomas, is just now foreign to my subject.

Our profession is now so degraded that it is rare to find men capable of reading any medical work not written in their vernacular language. In this city, containing so many Europeans from countries of various tongues, it is necessary for a physician to be acquainted with the Latin language. It has been for centuries the great vehicle of knowledge amongst the learned of civilized nations. It has conveyed to us the traditional literature of our calling. Some of our best apothecaries are foreigners, all of whom possessing a qualification from the licensing bodies of their respective countries have a competent knowledge of Latin, and can, with ease, comprehend our wishes expressed in that language, but who often find much difficulty in understanding us when we write in English. It is also desirable that you should have at least such knowledge of German and French as will enable you to read, in the original, works published in these languages. The perusal of a book in the words of an author, is generally a very different thing from a translation of the same, no matter how excellent the version may be.

In conclusion, I must observe, few studies take so wide a range as ours. To acquire a perfect knowledge of physiology—if such be possible—we must be acquainted with the properties of the material world by which we are surrounded, and of which our frames are formed. We must know the laws that regulate the forces of matter; for we are not exempt from these laws. All the subtle agencies of nature, gravitation, electricity, heat and light, all influence more or less and modify our condition. We may be well versed in the anatomy of the eye, but unless we know something of the laws which govern the refraction of light, we are unable to appreciate the adaptation of means to ends in the construction of the organ. Again, we may have a perfect

knowledge of every structure entering into the formation of the ear, but unless we know the cause, nature and phenomena of sound, our anatomical knowledge is a barren and unprofitable possession. The same observation will apply to the larynx—that wonderful apparatus for the production of the tones and inflections of the voice.

I now close with the words of a distinguished member of our profession, who has recently passed away from us: "In contemplating the living man, we regard not only his wonderful material fabric, but we see him endowed with faculties, which the laws of nature cannot explain—a creature of intelligence, with a moral sense, judging of right and wrong, and with a hope of a future and higher existence. And since we find that in the material framework, every part is perfectly adapted to its end, and to man's wants—the eye for sight and the ear for hearing,—and is perfectly suited both to the material things around, and to man's intellectual and moral nature; that considered in reference to the world without and the world within, it is perfect and complete, we may naturally infer that the intellectual and moral powers and capacities which make up the inner man—which are perfectly suited like the bodily organs to the material things around, but which are confessedly unsatisfied with their relations to them—that these faculties and powers have other and higher relations in a different sphere; that there is a completeness and a wise purpose in every faculty of the mind, as there is in every part of the bodily frame, and that the desire therefore of a future and higher existence has not been implanted in us in vain, and that the promise of it given to the heart will not be broken."

ARTICLE II.

COUGH OF REMOTE ORIGIN. BY W. E. CASSELBERRY, M. D.,
Physician to the Throat and Chest Department of the South
Side Dispensary, Chicago Medical College.

Involuntary cough is a reflex phenomenon, produced by irritation of certain peripheral ends, branches, or trunks of the pneumogastric nerve. The impression conveyed to the cough

center, said to be located at the point of origin of the pneumogastric nerves, in the medulla oblongata, produces therein a reaction, which manifests itself by the spasmodic action so well known as cough—a full inspiration, closure of the glottis, and forcible expulsion of the pent up air under contraction of the expiratory muscles and diaphragm.

The several localities in the distribution of the par vagum from which cough can originate, for clinical consideration, may be classed in two divisions, viz., those within, and those without the respiratory mucous tract.

With the first division, which for contradistinction, we may designate as coughs of proximal origin, we are not specially interested in this paper, farther than may serve to elucidate our subject proper. To this end, we will mention the "cough spots" of Stoerk.* This highly original Viennese professor has experimentally demonstrated, under laryngoscopic observation, that there are certain "spots" in the respiratory tract, any irritation of which will, with certainty, cause cough; namely, the interarytenoid fold, supplied by the internal branch of the nervous laryngeus superior, the posterior fibrous walls of the larynx and trachea, and the bifurcation of the trachea, supplied through branches of the nervus vagus. These observations are confirmed by Lennox Browne, of London.† From a more clinical standpoint, Stoerk‡ includes the bronchi and bronchioles as cough areas; but from both experimental and clinical observations, excludes the lung parenchyma, disease of which, he maintains, does not cause cough unless accompanied by bronchial congestion, irritation or inflammation.

The second division of the subject includes coughs originating without the respiratory tract—those in which the exciting cause is more remotely located—in the alimentary canal, heart, medulla oblongata, etc. The present is an age of instrumental precision in medical science, and we are prone to overlook the more intangible etiological influences. The once common "stomach cough" is now a hackneyed diagnostic phrase, relegated to the

*Klinik der Krankheiten des Kehlkopf der Nase und des Rachens, S. 220.

†Diseases of the Throat.

‡Op. cit.

ranks of the superannuated, quack and unprofessional. At its mere utterance the scientific physician (especially the younger generation) involuntarily shrugs his shoulders, proceeds to use his laryngoscope and auscult the patient. We see only with our mirror a laryngitis or tracheitis and hear the evidence of a bronchitis or more serious lung trouble.

A recent case has brought this subject to our attention, connected with which are points we wish to suggest thought upon rather than hope to entirely elucidate.

Mr. A., an active business man in the prime of life, had complained of cough for a year or more, better at times and again worse, apt to occur in severe paroxysms, but usually annoying him also in a more continuous form. He had had an occasional tickling sensation, but complained more of a sore, raw feeling in the larynx. During this time he had suffered constantly from dyspepsia with uncomfortable sensations or actual pain after eating, acid eructations, occasional vomiting, constipation and anorexia. A paroxysm of cough was at times terminated by an attack of vomiting. He had undergone various treatments, had consumed quantities of cough mixtures, homœopathic pellets, and proprietary remedies.

We saw the patient first in Oct., 1882. He was somewhat emaciated, pale, and nervous about himself, laid particular stress upon his cough, and disregarded his dyspeptic symptoms as a matter of little consequence. Laryngeal examination disclosed a slight reddish yellow discoloration of the vocal cords, and redness of the arytenoid cartilages, indications merely of a light chronic laryngitis. The trachea was somewhat congested. There was considerable follicular pharyngitis with congestion of the anterior pillars of the fauces, and slight thickening of the submucous connective tissue at the angles of the pharynx, behind the pharyngo-palatine folds. Physical examination of the chest gave no evidence of bronchitis or disease of the lungs.

The treatment consisted of a careful regulation of the diet, an occasional laxative, and 1-20 grain strychnia sulphate before each meal. Inhalation from the atomizer of tannic acid solution twice daily, occasional intralaryngeal applications of nitrate of silver solution, 20 grains to the fluid ounce, and local treatment for the

follicular pharyngitis. The patient improved rapidly, gained much in weight and appearance, the cough disappearing *pari passu* with the improvement in the dyspeptic symptoms, both cough and dyspepsia having vanished at the end of six weeks. At this time the laryngoscopic appearances, however, were practically the same as when first seen. The arytenoid cartilages were, perhaps, not so red, but the cords remained unchanged. Treatment had benefited the follicular pharyngitis, some of the larger follicular eminences having been destroyed by means of the London-paste, and others by nitrate of silver. The patient at this time is still well, but by advice continued to regulate his diet carefully and take occasionally some strychnia pellets, which act also by keeping his bowels in proper order. Meeting him a few days since in a street car, he remarked: "Doctor, my throat continues to behave itself beautifully." And upon query in reference to his dyspepsia, he remarked, that that too was all right.

This case we regarded from the first as one of reflex dyspeptic cough, or "stomach cough," if we may be permitted to use the expression. The duration and severity of the cough were out of all proportion to the small amount of laryngeal inflammation present, and its severity appeared to go *pari passu* with the severity of the dyspeptic symptoms. Its paroxysmal character, also, was too marked for a purely laryngeal cough, and the cessation of a paroxysm upon an attack of vomiting, was very significant. Moreover, the patient's impaired nutrition, in the absence of any chest symptoms, indicated his digestive organs as the chief cause of trouble. True, there was some chronic inflammation of the larynx, but apart from the fact that three-fourths of the people living in certain climates and seasons suffer from slight laryngeal catarrh, the cough in this case was sufficient to produce irritation, and the sensation of soreness and rawness complained of, I presume to have been muscular and directly caused by the cough. Finally the entire subsidence of the cough with the very slight change in the larynx, agrees as to the correctness of the diagnosis.

Acid eructations will aggravate or cause pharyngeal irritation, which may extend thence into the larynx, especially to the ary-

tenoid cartilages and interarytenoid fold ; or these portions of the larynx which form the anterior boundary of the pharynx as it merges into the œsophagus, may be affected by direct contact with the eructated acid material. Such an action was entirely probable, to some extent, in the case related, as the arytenoids were the only laryngeal portions which improved. In view of this same interarytenoid fold being one of the "cough spots" of Stoerk, its irritation in this way might be said to explain the entire gastric nature of the case, and any nervous influence be denied. Such an exclusive view of the case we do not believe, however, to be justified by an analysis of the symptoms.

The English-writing specialists have little or nothing to say relative to the subject, but *apropos* we will quote from Stoerk :*

"Through the experiments of Mayer and Pribraur,† supported by the observations of Traube and Henoch, the question of the so-called stomach cough, has appeared in a new phase. The older school of medicine, which looks upon disturbances in the digestive tract, especially collections of gas in the stomach and intestines, as etiological factors in many pathological states of the respiratory organs, has, in true presentiment, recognized a certain association between affections of the stomach and cough thus appearing reflexly, and has designated this cough as stomach cough. We must admire these observations, rendered certain, as they are, by more recent experiment. It is a known and much observed fact, that many violent and long enduring paroxysms of cough end with vomiting and find their termination through the same. One can assume now that the cough is caused by irritation of the terminal ends of the pneumogastric nerve in the stomach, exactly as it happens from certain 'spots' in the respiratory tract."

It is possible for a dyspepsia to supervene upon a pharyngitis, that is, the sequence of events is reversed, a primary pharyngeal catarrh, producing reflexly gastric disturbance. But this is apt to occur only in the most advanced stages of pharyngeal and naso-pharyngeal catarrh.

* Klinik der Krankheiten des Kehlkopfs der Nase und des Rachens, § 223.

† Sitzungsberichte der K. Academie der Wissenschaften B. 66 Abath. 3.

The stomach, although one of the most common, is not the only remote source of cough. We would use this instance but as a text for the whole subject.

Diseases of the naso-pharynx and pharynx, goitre, aneurism of the aorta, innominate and carotids. Cardiac affections, cervical or mediastinal lymphadenitis, œsophageal disease, in fact, disease of any organ involving one or more branches of the pneumogastric nerve.

Charcot mentions cough and dyspnœa among the symptoms of compression of the upper part of the spinal cord (Stoerk),* possibly due to involvement of the cough center in the medulla oblongata.

Aurists frequently observe cough arising from irritation of the inferior wall of the external auditory canal and of the pharyngeal opening of the eustachian tube—in the former case to be attributed to involvement of the auricular branch of the pneumogastric, in the latter case to the pharyngeal branches and plexus.

Cohen† and Robinson‡ both remark, that impairment of the voice and cough may occur in follicular pharyngitis without any visible implication of the larynx, “apparently by extension of the nervous influence of the pneumogastric nerve.” This is frequently observed with public speakers. Enlarged tonsils, too, are a prolific source of cough in children. Goitre and other cervical and mediastinal tumors occasion cough, which is probably at times remotely reflex, from pressure or other involvement of the pneumogastric trunk or its branches. In accordance with a general physiological law, reflex cough is, however, more easily excited by irritation of peripheral nerve ends. Nevertheless, numerous German experimentors (Stoerk§) have succeeded in exciting cough by irritation of the trunkal portions of the pneumogastrics.

Carotid aneurism can act in the same way—as a tumor. The nervus laryngeus recurrens being exclusively motor in function

* Op. cit.

† Diseases of the Throat and Nasal Organs, p. 182.

‡ Nasa! Catarrh, p. 132

§ Op. cit.

and therefore composed entirely of centrifugal fibers, it is decidedly improbable that its compression by aneurism of the arch of the aorta, or of the right subclavian, could produce a reflex cough, although cough is a most common symptom in these cases. Still it is not to be understood that in *all* cases of aneurism and of cervical and mediastinal tumors the cough is remotely reflex, for it may be due to direct compression of the trachea or a main bronchus, in the former case easily demonstrable by the laryngoscope, and in the latter by physical examination. Compression near the bifurcation would irritate the "cough-spot" at that point, and the cough be thus explained.

Functional and organic cardiac derangements are frequently accompanied by troublesome cough, but how much of purely nervous influence is concerned in these cases, would be difficult to say. As pointed out by Dr. Beverly Robinson in a paper read before the American Laryngological Association,* congestion of the larynx or entire respiratory tract with cough and other symptoms is not an uncommon result of debilitated or deranged cardiac action. Chronic interstitial nephritis, cirrhosis of the liver, spleen, etc., likewise by rendering the heart *relatively* weak, bring on congestive cough.

Thus we see occasioned another and partially distinct class of coughs, which, including in the same category cough produced by pressure upon the trachea or bronchi, may be said to arise directly from a proximal cause and yet be traceable to a remote origin.

As regards diagnosis little need be said. That little, however, must be said in testimony of the efficacy of the laryngoscope. Its value in the precise diagnosis of laryngeal and tracheal diseases is well known, and its use among practical physicians rapidly becoming more prevalent. In the case just related, it served as a valuable aid to diagnosis by exclusion, demonstrating the absence of sufficient cause for cough in the larynx and trachea. To this end its use is almost a necessity in all coughs of remote origin. To the routine practitioner a cough is a cough to be met by the inevitable cough-mixture; whilst the physician

* Archiv. of Laryngology, vol. III. NO. 3.

of an "investigating turn of mind," he who looks his patient all over before prescribing, will easily discover the *fons et origo* of the symptom and treat accordingly.

70 MONROE ST., CHICAGO.

ARTICLE III.

THE PULSATION OF VEINS.

The classic venous pulse consists of a regurgitant wave. It is due to insufficiency of the valves of the veins and of the auriculo-ventricular valves of the right side of the heart. With this insufficiency, the ventricular systole causes not only a forward impulse to the blood in the pulmonary artery, but also a backward impulse to the blood in the auricle, vena cava, jugular, and even in more peripheral veins.

Formerly no other venous pulse was recognized, the presence of any pulsation in veins being considered pathognomic of regurgitation through the bicuspid valves. Two other varieties, however, exist. One of these varieties is due to a relaxation of the minute arteries, which relaxation allows a projection of the arterial waves through the capillaries into the veins.

In Bernard's experiment upon the submaxillary gland by irritation of the chorda tympani, the arterioles become dilated, pulsations may be seen in the capillaries, and the blood issues in jets from the vein.

Quircke has reported several cases of pulsation in the veins of the hand which ceased upon the compression of the artery, but upon the compression of the vein ceased only on the proximal side. Here, also, the arterial wave must have been carried through the capillaries, as in the experiment with the submaxillary gland.

Pulsatory movement of the venous blood may occur, therefore, from a forward impulse through the capillaries, and also from a backward impulse, which proceeds directly from the heart. The first is most marked at the periphery, and the second is most marked at the center of the venous system. Both, however, are

positively systolic in both; the wall of the vein rises at the same time as does the arterial wall. The third variety of venous pulsation is distinguished from those we have considered by the fact that it is negatively systolic. This venous pulse contracts with that of the artery in a prolonged ascent, and a descent which is abrupt; also in the fact that the descent of the one and the ascent of the other are simultaneous. The vein therefore falls while the artery rises, and rises while the artery falls.

The abrupt descent is in this venous pulse the feature which is most marked. Moss, in 1876 (*Die Diagnostik des Pulses*), named it the negative pulse of the veins.

Modern interest in the subject commences with this date.

In 1828, however, Hedmeyer reported pulsatory oscillations in the fluid of a tube, one end of which was emersed in water, the other end being inserted into the internal jugular of the horse.

Meyrich, in 1845, repeated the experiment upon dogs. He found the fluid to rise during the systole, and to fall during the diastole of the heart. According to Kallett (*Hermann's Hdb. du Phys. Bd. iv. Th. 1*), Meyrich ascribed the periodic ascent to the aspiratory influence of the auricle at the moment of its relaxation. Mosso supposed it to be due to a periodic increase in the aspiration of the thorax. The plethysmograph demonstrates that the heart occupies less space during its systole than during its diastole, also with a manometer in the mouth it has been noted that the mercury with suspension of the respiration falls during the systole and rises during the diastole of the heart. It was upon these data that Mosso's conclusion was based.

Gottwall, however, in 1881 (*Arch. f. d. Ges. Phys.*), with experiments upon dogs, found the pulse to persist after the opening of the thorax; he, therefore, considered it directly dependent upon the heart. Riegel (*Berl. Klin. Wochenschrift*, March 2, 1881), revised the theory of Meyrich. Relaxation of the auricle is synchronous with the contraction of the ventricle; the fall of venous pressure is, therefore, said to be synchronous with the systole of the heart. Riegel, in May of 1882 (*Deutsches Arch. für Klin. Med.*), issued a series of tracings taken simultaneously from the carotid artery, and from the jugular vein. These tracings corroborate that coincidence in time which has been referred to.

The ascent of the vein was proved to be diastolic, and the descent to occupy the time of the arterial percussion stroke. Francois Franck, in April of 1882 (*Gaz. Hebd. de Med.*), gave simultaneous tracings from the heart and from the vein. These tracings show further that the descent of the first smaller wave accompanies the relaxation of the ventricles. Following the cardiac cycle of events, he finds the ascent of the apex due to the accumulation of blood from obstruction to its discharge during the contraction of the auricle; the sudden descent to the aspiratory influence of the relaxation of the auricle; the small descent to retardation from the loss of that influence; the descent to the aspiration of the ventricle, and the prolonged ascent to the gradual repletion of the whole right heart.

The literature of this subject has been comprised of the writings of Mosso, of Gottwalt, of Regil and of Franck.

By none of these experimentors has the pulse been obtained beyond the jugulars, excepting once by Gottwalb in a bronchial vein. Recently it has been obtained by Dr. Sarah E. Post, from Milwaukee. Also in veins of the forearm and in the foot (N. Y. Med. Record, Feb. 17, 1883). Dr. Post has not only traced this pulse farther per-pharally than has any previous observer, but she is also second only to Marcey in the registration of any kind of a venous pulse in the lower limb. It is interesting to note that the instrument used by Dr. Post is American in its origin and make. The lady concludes as follows: "The recognition of this pulse is important because it may be of sufficient amplitude to mark the trace of the arterial pulse, because it must be eliminated in the diagnosis of the pulse of regurgitation through the tricusgid valve and because it probably possesses a diagnostic importance of its own. Its recognition with the Pond sphygmograph is not difficult. Having obtained the radial arterial pulse, move the instrument about $\frac{1}{2}$ c. m. toward the exterior side of the arm, remit one-half the pressure, and if it be present its tracing will appear. Complaint regarding the unreliability of the Pond sphygmograph have originated in the fact that it so readily registers this pulse. Not being recognized it has been considered a vagary of the little instrument itself."

Abroad, this pulse is commonly called the normal venous pulse.

In the radial vein, Dr. Post considers it to have a pathological significance. As she has found it only in connection with venous engorgement from arterial relaxation, or from insufficiency in the heart, she supposes it to be extended and accented by that condition, when associated with sufficient cardiac power. It always disappears with the failure of the heart.

SKEPTICISM IN MEDICINE.—Certainly he who has not faith, and does not use in the spirit of faith, properly guided by proper consideration and an ever increasing experience, opium, ipecacuanha, mercury, arsenic, antimony, ergot, iron, zinc, phosphorus, bismuth and their preparations, chloral, croton chloral, aconite, belladonna, sp. eth. nitrosi, sp. eth. sulphurici, quinine, iodide, and bromide of potassium, and many other drugs, can never be a thoroughly successful practitioner in the curative results of his practice, nor can we believe him to be a happy one, if possessed of a conscience, since he must see many cases, that in other hands may do well, go from bad to worse, and end fatally in his. Instead of lowering the estimation in which our materia medica is held, increased knowledge is likely to carry it to a still more honored position, when the powers of each drug, from accurate observation, become more thoroughly defined.—*The Medical Press.*

A MICRO-ORGANISM FOR YELLOW FEVER.—*Peronospora Lutea* is the title of the Micro-Organism which Dr. Carmona Del Valle believes to be characteristic of yellow fever. The germ of this cryptogerm are always to be found in the excretions and in the fluids and secretions. Animals inoculated with it show febrile symptoms. After recovery they are not affected by a second inoculation.—*The Medical Record.*

DEATH OF A LEPROUS PATIENT AT SALEM, MASS.—Charles D. Erby, a leprous patient at the Salem (Mass.) Almshouse, who contracted the disease in the Sandwich Islands, and whose case has excited much apprehension, died there March 19th.—*The Medical Record.*

Society Reports.

ARTICLE IV.

REPORT OF PROCEEDINGS OF THE ILLINOIS STATE BOARD OF HEALTH. QUARTERLY MEETING, Chicago, April 12-14, 1883.

The regular quarterly meeting of the Illinois State Board of Health was held at the Grand Pacific Hotel, in the city of Chicago, the members being called to order by the President at 9:45 a. m., Thursday, April 12, 1883.

Present: Newton Bateman, LL.D., President, John McLean, M.D., R. Ludlam, M.D., A. L. Clark, M.D., and John H. Rauch, M.D., Secretary.

The regular order of business having been suspended, on motion of Dr. Clark, so as to take up the investigation of charges against a number of medical colleges and of private practitioners, the Board went into executive session for that purpose. At this session, which continued throughout the day and evening and was resumed for some time on the following day, action was taken on the charges against six colleges and seven individuals, and the following results were authorized to be made public:

Resolved, That the Indiana Eclectic Medical College, of Indianapolis, Ind., and the Joplin Medical College, of Joplin, Mo. having given assurances of their intention and determination to fully carry out and abide by all the requirements considered by the Illinois State Board of Health as essential to the good standing of a medical college, the diplomas of said colleges will be recognized in the future by this Board whenever, and so long as, it shall appear that their methods and practices entitle them to be classed among "medical institutions in good standing."

Resolved, That, under the recent decision of the Supreme court of the State of New York declaring the charter of the United States Medical College, of New York, null and void, this Board can no longer legally recognize the diplomas of that institution.

Resolved, That in the case of Dr. A. A. McReynolds, the Secretary is instructed to notify him that, unless the objectionable practices complained of are at once discontinued, his certificate will be revoked.

Resolved, That in the case of applications now pending for certificates on diplomas of the Indiana Eclectic Medical College, the Secretary be endowed with discretionary power to act for the Board.

Resolved, That the objections heretofore existing to the granting of a certificate to Dr. H. I. Hoppins having been removed, the Secretary is authorized to issue such certificate.

Resolved, That Certificate No. 2297, issued to Dr. William Keller, December 20, 1877, be, and hereby is, revoked.

Resolved, That Certificate No. 142, issued to Dr. M. Morgan, July 6, 1878, be, and hereby is, revoked.

The examination of candidates for certificates was begun at 10 a. m., and at 10:30 p. m., the Board adjourned until the following morning.

FRIDAY, APRIL 13, 9:30 a. m.—The Board met pursuant to adjournment; present as before. The regular order of business being taken up, the minutes of the sixth annual meeting, January 11–12, 1883, were read and approved.

Under the call for reports of officers, Dr. Rauch presented the following:

QUARTERLY REPORT OF THE SECRETARY.

During the quarter, ended March 31, 1883, there were received in the Secretary's office 1,002 communications, letters, reports, etc., and 1,371 letters, postals and other written communications were sent out. Of printed matter there were distributed 1,876 copies of the Fourth Annual Report, and 46,920 copies of the Preventable-Disease Circulars and miscellaneous publications, blanks, etc., of the Board. There were also received 57 telegrams, and 40 were sent, at a cost of \$20.30. The postage account for the quarter was \$144, and the express account \$61.70, for which latter sum 298 packages were sent.

CERTIFICATES AND LICENSES.

State certificates entitling to practice medicine and surgery* were issued to 149 graduates upon the diplomas of colleges in good standing, and 3 certificates were issued to practitioners on length of practice in the State. Certificates to midwives were issued to 9 graduates, 2 practitioners, and to one upon examination. Six candidates presented themselves for examination in obstetrics, five of whom failed to come up to the required standard.

Two applications for the hundred-dollars-a-month license to itinerants, both from graduates of reputable medical schools, have been received, but I have felt constrained, in the interests both of the public and of the profession, to refuse the applications.

EXEMPTS AND NON-GRADUATES.

Among the certificates issued during the past month a considerable number were to practitioners exempt from the Medical-Practice Act, by reason of length of practice in the State, but who have recently graduated from reputable medical colleges; and also to others holding certificates based upon examinations, and who have pursued the same course. It is gratifying to be able to record this result of the recommendations of the Board, whose policy it has uniformly been to urge non-graduate candidates for its certificates to complete the regular curriculum of study, and obtain the diploma of a college in good standing. As nearly as can be ascertained there are now only about 650 non-graduates left in the State, as compared with about 3,800 at the time when the law went into effect.

THE MEDICAL-PRACTICE ACT AND THE COLLEGES.

While the public undoubtedly profits by this obvious improvement in the status of the profession, the medical colleges have also benefited in this, among other ways, through the operation of the Medical-Practice Act. To some extent this is recognized by the colleges themselves; and their reception of the Board's standard of minimum requirements may be taken as an evidence of their generally favorable attitude toward the law and the methods of its enforcement which have thus far been pursued.

Since the last meeting many letters have been received from colleges, both in this and in other States, asking specific information as to whether the Board would recognize diplomas if issued to certain students under the circumstances as detailed. A number of inquiries, both official and personal, have also been answered concerning the standing of colleges in various parts of the country, and the value of their diplomas in this State as entitling to practice. This correspondence marks an increasing sense of accountability in the teaching or educational department, and of its responsibility under the law. If this sense can be sufficiently quickened it may correct some of the evils arising from the want of an examining body independent of the colleges, and there is reason to hope for such result in the progress already made.

In the annual announcements of the college which issued this diploma, among the regular requirements for graduation one is stated to be "such primary education as is clearly requisite for a proper standing with the public and the profession;" and another that "he must have pursued the study of medicine three years." That the former requirement was ignored is obvious from the letter quoted; and it is probably doing no one injustice

to accept Dr. ——— statement—that he “attended two courses of lectures, paid the fees and got a diploma” as a full summary of his medical education, so far as the college was concerned.

As a result of my own official experience during the past six years, I think it entirely within bounds to say that a strict adherence to their advertised requirements is the exception among colleges rather than the rule. In fully three-fourths of those which have come under my observation there have been irregularities of more or less gravity. It is unnecessary to attribute motives, for they are obvious and the natural result of the competition and rivalry between the various schools. To make the acquisition of the coveted diploma easy is the sure way to increased pecuniary returns and large classes, with a consequent substantial advantage in advertising both the college and the individual professors.

That the responsibilities of the Board are largely increased by this evil is manifest. Charges are now being investigated involving five different colleges whose diplomas have heretofore been recognized by the Board; and in the case of three other colleges I have refrained from issuing certificates upon their diplomas, because of a conviction that they have not the facilities to carry out their published requirements. In one instance, for example, there have been a number of changes in the personnel of the faculty since the announcement was published, and the diplomas issued at the close of the session of 1882-3 bear the signature of a graduate of 1882 as the incumbent of three different chairs, namely, as professor of anatomy, as professor of physiology, and as professor of hygiene.

MEDICAL-COLLEGE ANNOUNCEMENTS.

Announcement literature, in itself, presents some features worthy the serious attention both of the Board and of the profession. Aside from its legitimate function as a medium of information to the student concerning his studies, the annual announcement, so lavishly scattered throughout the country, is often prostituted to advertising the college and the claims of individual members of the faculty, in terms and manner differing little, if any, from those of the ordinary advertising quack. In the course of the past six years I have carefully examined nearly all the announcements issued in this country, and do not hesitate to say that many of them are of such a character that if a private practitioner had been guilty of publishing a professional card, making such claims and couched in such terms, he would have been expelled from almost any medical society for a gross violation of ethics.

“UNPROFESSIONAL AND DISHONORABLE CONDUCT.”

While this subject of “ethics” is attracting so much attention, it would seem to be a fitting time for the Board to consider whether the granting of a diploma to an unqualified and incompetent person, or in open violation of the requirements of the institution, should not subject those concerned in it to the odium and disqualifications which attach to any other unprofessional and dishonorable action. It might be suggested that this is a

proper subject for the consideration of medical societies; but it seems to me that the Board may also fitly discuss the subject.

MODIFICATION OF AFFIDAVIT.

In view of our past experience of the evasions of many colleges, even of their own requirements, as well as of the requirements of this Board, I have to suggest that it would be well to modify the present form of the affidavit so as to require graduate-applicants for certificates to state whether the requirements of the individual college and of the Illinois State Board of Health, in the matter of medical education, have been fully carried out. Among other things, such modification of the affidavit would be of material assistance in enabling the Board to determine the good standing of colleges, as the law directs.

IMPORTANCE OF THE STUDY OF HYGIENE.

It may be mentioned that the only criticism on the Schedule of Minimum Requirements thus far received are in the nature of a suggestion that the usual college curriculum is already so full that there is no place for a chair of Hygiene. An examination of the different chairs and lectureships in many colleges reveals the fact that much time and attention are occupied by lectures and clinics on specialties, which, in many instances, are mere advertisements for the lecturer. A knowledge of Hygiene and Preventive Medicine is of far more importance to the general practitioner, as well as to the public, than such superficial acquaintance with many of these specialties as only is possible except in post-graduate courses. Contact with medical men in the discharge of my official duties has strongly impressed me with the value of, and the necessity for, this study.

UNITED STATES MEDICAL COLLEGE.

The Supreme court of the State of New York has recently decided that the United States Medical College is not a legally incorporated institution. In consideration of this, and of the further fact that the school has granted a diploma to a notorious "cancer doctor" of this State who could, under no circumstances, obtain a diploma from any Illinois college, I suggest that the United States Medical College of New York be placed in the list of those not recognized by this Board. Two of its diplomas were recognized conditionally some time since.

SANITARY CONVENTION.

It has been found to be impracticable to hold the convention, proposed at the last meeting, for the purpose of framing a uniform sanitary code. A digest of all State laws pertaining to the public health, to water supply, sewerage, drainage, tree-planting, cemeteries, and other matters having a sanitary bearing, has been prepared; but the pressure of current business—increased by the number of certificates to be issued at this season of the year—has left no time in which to make adequate preparation for such a convention; and I have, therefore, not felt warranted in issuing the call authorized by the Board in January.

PREVENTABLE-DISEASE CIRCULARS.

Twenty thousand copies each of the circulars on the Prevention and Control of Scarletina, Diphtheria and Typhoid Fever have been printed, in accordance with the order previously made. The demand for these circulars has been unexpectedly large, and a number of requests have been received for them in the German language. Unfortunately, there is no provision for State printing in that language—in fact, there is a constitutional prohibition against any printing under the State contracts except in the English language. As the Board has no means at its disposal out of which to defray the cost of a special edition in German, it is unable to comply with these requests.

SMALL-POX.

The State remains gratifyingly free from the disease. There have, at no time during the winter and up to date, been any more cases than may be reasonably expected among a population so much exposed as that of Illinois.

Since January 1, 1883, there have been cases at the following points:

January 19. One case of small-pox and four of varioloid at Moline. No deaths, and no spread of disease beyond those in the boarding-house where the first case occurred. Vaccination in community very general during past two years. Source of contagion, as yet unascertained. [The terms "varioid" and "small-pox" are here used in their proper sense—as meaning small-pox modified by vaccination or not modified by vaccination.]

January 17. A fatal case at Plano, Kendall county. Child, unsuccessfully vaccinated a year ago. No spread of disease. Source of contagion, unknown.

January 28. Three cases of small-pox and a few of light varioid, in the town of Plymouth and vicinity, Hancock county. Two deaths among the three unvaccinated. Attending physician writes that "all the cases of varioid were so light that the efficacy of vaccination was apparent to all." Source of contagion, a resident returning from Nebraska; disease contracted en route.

February 1. One case of small-pox in Honey Point township, Maccoupin county. Disease contracted in Paducah, Ky. Three cases of varioid resulted from this case. No deaths.

February 5. An unvaccinated infant in the town of Willow Branch, Piatt county. Recovered; no other cases. Source of contagion unknown.

February 12. The most serious outbreak which occurred during the period was that in Crouch and Shelton townships, Hamilton county, and the large proportion of cases of unmodified small-pox fully illustrates the results of the neglect of vaccination. The first cases were reported to be contracted from an immigrant. Up to date of last report there had been 21 cases in all, of which number only one had been vaccinated. One of the attending physicians states that if vaccination had been enforced last winter the outbreak would have been confined to the first cases.

February 16. Two tramps found in the streets of Belleville, St. Clair county, both suffering with varioloid. Not vaccinated since infancy. Recovered; no spread of disease. Source of contagion, St. Louis.

March 7. Dr. J. D. Young, of Pellonia, Massac county, reports a case of confluent small-pox contracted in Paducah, Ky. March 20, he writes: "A general compliance with the order of the State Board of Health has, no doubt, saved us from a fearful small-pox scourge. Our threatened invasion from Paducah, which is full of the disease in a very fatal form, has apparently aborted, though I continue to re-vaccinate all who have been exposed. The sister of the young man first attacked is our only other victim. Both died on the fourth day, and neither had ever been properly vaccinated."

March 10. Four cases of unmodified small-pox, at Grand Ridge, LaSalle county. One death; no spread; source of contagion believed to be the same as in the next group.

March 11. Fritz Bocker, a German immigrant, arrived in New York, February 7, via Steamer Elbe from Bremen. Was sick on landing. Reached Verona township, Grundy county, about the middle of February, then having several pustules on his face. From him cases have resulted in Verona, Grundy county, and in Allen and Brookfield townships in LaSalle county. The contagion is not yet eradicated, but no new cases have occurred for several days.

March 23. A case of varioloid occurred in the town of Greenfield, Greene county. No particulars yet received.

March 31. One case of varioloid in Makanda, Jackson county. The patient contracted the disease in New Orleans. An unvaccinated infant has since developed small-pox. Two other unprotected persons are known to have been exposed; but aside from these it is not believed that there will be any other cases.

The foregoing comprises all the points reported as having been visited by the disease during the past three months, except an occasional case in Chicago, and a few cases during March in Cairo, contracted on the river. It will be noted that in eight out of the twelve the source of contagion is already known to be by importation from beyond the State. Two of these were from Paducah, Ky., and the disease is so prevalent at many points along the Ohio river, outside of Illinois, that a strict quarantine is maintained against them by some of our Ohio river towns.

Some progress has been made in the preparation of the history of the Small-Pox Epidemic of 1881-82, and I submit such figures as have thus far been arrived at for the purpose of enabling the Board to judge of the importance of this work and the necessity of its prompt completion.

The history of the epidemic at fifteen places has been compiled with the following results:

Total number of cases at fifteen points.....	457
Total number of deaths.....	183
Total reported cost to individuals and the community.....	\$25,761 09
Average of duration of each case.....	33 days
Aggregate loss of time to patients, exclusive of deaths, and of loss of time of attendants, members of family quarantined, etc.....	16,181 days

At two points out of the fifteen the disease extended over a considerable period—as one nearly four months and at the other nearly six months. In the remaining thirteen places the disease was confined to the first cases of families attacked, and the outbreak was suppressed within an average period of thirty days. This is believed to have been the uniform result wherever the rules of the Board were faithfully carried out.

The following figures are most instructive:

1.—Total number cases tabulated.....	457
“ “ deaths among same.....	183
Percentage of mortality.....	40.0
2.—Total No. cases found to have been vaccinated.....	210 recovered..... 9 died
Total number never vaccinated.....	64 recovered..... 17 died
Percentage of deaths among vaccinated.....	4.5
“ “ “ unvaccinated.....	65.2
3.—Total No. adults found to have been vaccinated.....	162
“ “ “ vaccinated in infancy or childhood only.....	107 recovered..... 8 died
Total number vaccinated since puberty 35 recovered.....	1 “
“ “ “ both before and after puberty 12 recovered.....	0 “

These three tables strikingly illustrate not only the virulence of the epidemic—the mortality rising 40 in each hundred attacked; the protective influence in general of vaccination—only 4½ in every hundred dying among those who had ever been vaccinated, while more than 65 out of every hundred unvaccinated succumbed; but also the fact that vaccination bears a marked relation, in its protective power, to the frequency of its repetition and to its nearness to the date of exposure. Thus it is seen that of 163 vaccinated adults attacked, 151 had been vaccinated only once, and only 12 of them twice or oftener. Of the 121 vaccinated once only, 115 were vaccinated in infancy or childhood, and of this number 8 died. Of the remaining 36, vaccinated at dates nearer the time of attack, only 1 died.

To put this in another way: The figures show that out of 1,000 vaccinated adults exposed to and contracting small-pox (or varioloid), 705 cases will be among those vaccinated only in infancy or childhood; and of this number about 70 will die. There will be about 220 cases among those vaccinated *since* childhood—that is nearer the date of exposure—but also vaccinated only once; of these 2 or 3 will die. The remaining 75 will consist of those unusually susceptible cases who, notwithstanding repeated vaccination, contract the disease whenever exposed.

The foregoing are some of the lessons which the immense amount of data accumulated will enable the Board to present to the profession and the public, for the prevention of future epidemics of the disease.

GLANDERS.

A communication from Dr. Paaren, the State Veterinarian, was received on Saturday last, April 7th, enclosing the following copy of a letter which had been addressed to him:

STERLING, ILL., April 2, 1883.

Dr. N. H. Paaren, Chicago, Ill.

Geo. W. Remage, M. D., joins me in requesting you, in your capacity as State Veterinarian, to come out to our place to examine some glandered horses—at your earliest convenience. If you will drop me a card or telegram I will have arrangements made to take you out—the distance being thirteen miles from Sterling.

Yours truly, etc.,

M. R. TRUMBOWER.

NOTE.—Mr. Conway, the owner and keeper of said glandered horses, has for years been treating nasal gleet, and now pays the dreadful penalty of a loathsome death by glanders in his own system. Two weeks ago a son of his died of the same disease.

His farm has been a center of infection for years, and I was called to-day by some of his neighbors to examine his horses. Out of 13 I found five suffering from glanders in various stages of development. I had them placed by themselves, but not having authority to kill them myself, and the neighbors not desiring to do it under the circumstances of the family affliction, we considered it a proper case for the supervision of the State authority. All the horses have been running in the public road and have no proper care now, and the neighbors are afraid to go near the place.

Yours truly,

M. R. TRUMBOWER.

I at once telegraphed Dr. Trumbower for the name and address of the town clerk, to whom the following order was immediately forwarded:

OFFICE OF THE SECRETARY, SPRINGFIELD, ILL., April 8, 1888.

SIR: By virtue of authority vested in this Board, you are hereby directed to convene your town board of health for the purpose of taking immediate action concerning the existence of glanders in your township.

Section 127, of article xiv, chapter 139, of the Revised Statutes, constitutes the supervisor, assessor and town clerk of each township a board of health, and empowers such board to make and enforce any rules and regulations tending to check the spread of contagious diseases.

From such information as is in possession of this office, prompt measures should be resorted to in the present case. The diseased animals should be killed, the premises thoroughly disinfected, and if any persons are found to be afflicted they should be isolated under the supervision of the medical attendant. The disease is one of the most contagious and loathsome character, and the fact that two deaths have already occurred from it admonishes to instant action and the employment of all needful precautions.

You are requested to make a full report of the facts, and of the action of your board to this office as soon as practicable.

By order of the Board.

JOHN H. RAUCH, M. D.,

Secretary.

To S. S. COBB, Esq., Town Clerk, Coleta, Genesee Township, Whiteside County, Ill.

On the 9th inst., the following communication was received from Dr. Trumbower:

STERLING, Ill., April 7, 1893.

Dr. J. H. RAUCH, *Secretary State Board of Health*:

J. J. Reimers, veterinary surgeon, of Morrison, Ill., and myself were out to see and examine the glandered horses on the Conway farm yesterday; we condemned six, one of which was shot immediately. The balance were placed in quarantine awaiting the orders of the town board of health, or the action of the neighbors. I think the necessity and consequent loss in killing the horses will be compromised with the family—a subscription taken up to reimburse them for the loss. I left definite directions as to hygienic measures to be taken as soon as the horses are removed, but it is doubtful whether they will be carried out, except under compulsion.

Geo. Conway was taken sick on the 11th of March with evidences of catarrhal fever and a swelling over the frontal sinus, followed by induration of the right parotid gland, discharge from the nose, pustules and bullæ over the face, trunk and limbs. Died on the 22d, aged 17 years and a few days.

Wellington Conway, the father of the boy, was taken on the 23d of March with an attack simulating pleuro-pneumonia, followed by swelling of the glands, formation of pustules, ulcers, etc., died on the 22d of April. He was the attendant of the son throughout his sickness, and the presumption is that he took the disease from the son.

There is not the least doubt in my mind, nor in that of other competent men who know the history of the cases, that the disease was "equinia."

The disease in two of the horses is so well marked that no one at all familiar with the disease could possibly make a mistake. Two horses have it in the chronic form and are apparently cases of long standing, one of them probably extending over a period of four years. The remaining animals are just showing evidences of the affection sufficient to justify condemnation.

Yours truly,

M. R. TRUMBOWER.

I have requested the State Veterinarian, Dr. Paaren, to visit the infected locality, and to institute such measures in aid of the efforts of the town board, as may be necessary—using the legal authority of the State Board to that end, if required.

BURIAL PERMITS AND DEATH CERTIFICATES.

Since the last meeting, the town of Maroa, in Macon county, has adopted the burial-permit ordinance proposed by the Board.

It is noted that in some instances the maximum penalties imposed by the ordinance, as enacted, are in excess of the limit prescribed by the statutes. Attention is here called to this fact in order to prevent such a sentence being passed as would result in its being set aside, and thus defeat the purpose and intent of the enactment. Among the powers granted to city councils in cities, and to the presidents and boards of trustees in villages, in article v, of chapter 24 of the Revised Statutes, is one authorizing

them to pass all ordinances, rules, etc., etc., with such fines or penalties as they shall deem proper, "*provided*, no fine or penalty shall exceed \$200" * * *. The validity of an ordinance is, probably, not affected by the fact that its maximum penalty is more than \$200; but any sentence imposing a fine of that amount would, undoubtedly be illegal. It would be better to amend any ordinance, heretofore passed on this subject, where the maximum penalty exceeds \$200, so as to conform to the statute; and, in all cases, to secure the necessary publication—that is, at least once within one month after passage; ordinances imposing fines or penalties not taking effect until ten days after such publication.

Dr. James F. Potts, of Whitehall, President of the Greene County Medical Society, in a letter of the 24th of February, makes the following suggestions concerning the physician's certificate of the cause of death:

That the law be so changed as to require the undertaker, or the man who furnishes the coffin, to make reports of death, the physician last in attendance merely filling the necessary part of it relating to duration of sickness, cause of death, etc. At the last meeting of the Medical and Surgical Society of Western Illinois, I brought this matter up, and it met the approval of every member present.

The discussion which followed revealed the fact that, while reports of births were generally made, reports of deaths were surely falling more and more into desuetude, and that something must be done, or the Medical Act will fall even in the house of its friends.

The obstetrician, after the labor is ended, is on the ground, and has an abundance of time to make the necessary inquiries, and moreover, he takes pride in doing so and in making reports.

It is far different with the physician as regards report of death. He is hardly ever present at the time of death, and, either in a wide country practice or in a crowded city, he may not see for months, or may never see, the friends or parents of deceased. These are lost. In a considerable proportion of cases, especially chronic ones, he does not know that he was last in attendance, and these are lost. Another considerable proportion of survivors are so dissatisfied with the physician, on account of the unfortunate termination, that it is a very delicate and unpleasant topic for both parties, and many of these are lost. Sudden deaths often are not reported—from violence, accident, heart disease, apoplexy, etc., and these are of grave importance in vital statistics. Many physicians, too, are bull-headed, and will not report, while others are careless, and report only in part.

Vital statistics, to be of any value, must be full, and it would seem impossible to get anything like full reports under our present law. With the change proposed, we may reasonably expect as full reports of deaths as we now have of births; for the undertaker, like the obstetrician, would have abundant time and opportunity to make inquiry, and would take the same pride in making the report.

This subject will doubtless be presented at the coming annual meeting of the State Medical Society, and I see no reason why, if the change is desirable, it may not be made during the present session of the Legislature.

To this letter I replied in substance, endorsing the suggestion of a good

one and eminently practical, stating that I had "frequently considered whether such a division of the certificate could not be made under the law as it now stands, but without arriving at a satisfactory conclusion," and adding that "it is to be hoped the present General Assembly may do something toward perfecting legislation upon vital statistics." While awaiting such legislation, the custom which obtains where burial permits are required—and by which the undertaker practically does what Dr. Potts suggests—might be more generally adopted.

SANITARY COUNCIL.

On the third and fourth of April, the fifth annual meeting of the Sanitary Council of the Mississippi Valley was held at Jackson, Miss. In some respects, the results of this meeting promise to be of greater importance to the health interests of the Valley than those of any other since its organization. As stated in the circular letter of the Executive Committee, the suspension of some of the most important functions of the National Board of Health—especially its Sanitary Inspection Services; the attitude of the Louisiana State Board of Health toward the New Orleans Auxiliary Sanitary Association, and toward other State Boards of Health in the Valley; the continuance of Asiatic cholera in threatening proximity to lines of travel, and the prolonged existence of a fatal form of *cholera nostra* in some parts of Mexico, together with other considerations touching the public health, have combined to renew the interest which originally attached to the deliberations and actions of this body.

Fifty delegates, from twelve States, were in attendance at Jackson; and among these, in addition to the various sanitary organizations, there were present representatives of the leading business and transportation interests. Illinois was represented by Dr. W. A. Haskell and the Secretary of the State Board; Chicago, by Dr. J. M. Hall, of the Health Department, and Dr. J. G. Kiernan; Joliet, by Dr. R. J. Curtiss; Springfield, by Drs. B. M. Griffith and J. L. Million; Braidwood, by Dr. Le Caron; Danville, by Dr. P. H. Barton; Belleville, by Dr. Schlernitzauer; Martinsville, by Dr. W. H. Doak; and Carbondale, by Dr. Heber Robarts.

Resolutions were adopted by the Council reciting that, as the National Board of Health possesses the fullest confidence of the Valley, it is recommended that the President of the United States place the epidemic fund of \$100,000 in the hands of that body for use in case of necessity; that the river and rail inspections, heretofore made by the National Board, be continued, if necessary, under the supervision of the Council, in the event that the former organization is unable to do so, and that the various States interested contribute to defray the expenses of such inspections.

The full report of the meeting is at hand for the information of the members, but its reading at the present time is unnecessary, attention having been called to the points upon which it seems desirable the Board should take action at this time.

All of which is respectfully submitted.

JOHN H. RAUCH,
Secretary.

On motion of Dr. Clark, the Secretary's report was received and referred to a committee appointed by the Chair (consisting of Drs. Clark, Ludlam and McLean), to formulate expressions of the views of the Board on the various recommendations and suggestions.

The executive session was then, at the instance of the Secretary, resumed and continued, with a recess for dinner, until 4 o'clock P. M. At that hour the regular order of business was called, and Dr. Clark, from the Committee on the Secretary's Report, submitted the following:

Mr. President:

Your committee, to whom was referred the Quarterly Report of the Secretary, begs leave to state that it has given due consideration to the various matters therein discussed, and offers the following resolutions for the action of the Board:

Resolved, That the Illinois State Board of Health cordially approves the following actions and recommendations of its Secretary, as set forth in his quarterly report:

First. The refusal to issue, in the interests of the public and the profession, the hundred-dollars-a-month license to two itinerants.

Second. The recommendation that medical colleges be again furnished with copies of the Schedule of Minimum Requirements, and requested to state formally their action thereon—such request to embody so much of the Secretary's argument for the necessity of this action as may be necessary for the further information of the colleges.

Third. The recommendation of the modification of the affidavit, required to be made by applicants for certificates, so as to require them to state whether the requirements of their individual colleges and of this Board, in the matter of medical education, have been fully complied with.

Fourth. The suggestion of the desirability of a prompt completion of the report of the Board's investigations into the causes, and the methods of preventing a repetition of the late small-pox epidemic.

Your committee would add that it knows of no more valuable work to the community than that foreshadowed in the facts and figures concerning this epidemic which are briefly given in the Secretary's report; and that it considers the prompt dissemination of such knowledge one of the most important with which the Board is charged, both by the constituting act, and by the terms of the contingent appropriation for the prevention of epidemics of contagious and infectious diseases.

With reference to the suggestion that the granting of diplomas by colleges to incompetent or unqualified persons, or in violation of their published requirements, should subject those responsible therefor to the odium and disqualifications attaching to any other unprofessional and dishonorable action, your committee concurs in the opinion expressed, that the subject is a fitting one for the consideration of the Board.

In the matter of the United States Medical College of New York City, the adoption of the following resolution is recommended:

Resolved, That, in view of the decision of the Supreme court of the State of New York—to the effect that the charter of the United States Medical College of the City of New York is null and void—the diplomas of said college cannot be legally recognized by this Board.

Respectfully submitted.

Committee, { A. L. CLARK,
R. LUDLAM,
JOHN McLEAN.

The report of the committee was received and adopted. The Secretary called attention to the passage concerning the certificate of death, and suggested that the failure of physicians to make the returns required by law—returns of such vital importance to the public welfare—partakes of the character of unprofessional and dishonorable conduct.

On motion of Dr. McLean, the Board endorsed the recent action of the Sanitary Council of the Mississippi Valley, and empowered the Secretary to take such steps, on behalf of the Board, as may be necessary to make effective that action [so far as the State of Illinois is concerned.

Dr. Rauch briefly alluded to the necessity of harmonious action with the other Valley States—not so much with reference to the exclusion of yellow fever from the State, of which he had little fear, but on account of the demoralization of trade and commerce which ensues during the existence of that disease in the absence of co-operation between the various health authorities in the Valley. At 5 p. m. the Board adjourned until 7 p. m.

At the evening session, on motion of Dr. Ludlam, the Secretary was requested to announce that, in future, examinations of non-graduate candidates for certificates from the Board would be preceded by an examination into their general educational requirements—such examination, in default of a diploma or certificate of graduation from a literary and scientific college or high school, to embrace the usual branches of a good English education, including mathematics, English composition, and elementary physics or natural philosophy.

On motion of Dr. Clark, the Secretary was authorized, during the interval between the present and the next meeting of the Board—regular or special—to take such action, in the event of a

serious emergency arising threatening the public health, as, in his judgment, may be necessary.

The remainder of the evening session was occupied in the examination and rating of the answers of candidates in the branches so far as completed; and at 10 p. m. the Board adjourned until Saturday morning at 10 o'clock.

SATURDAY, APRIL 14, 1883.—The Board was called to order by the President at 10 o'clock a. m., with the members in attendance as at previous session.

Dr. Clark asked the opinion of the members upon the feasibility of an effort to secure one common Examining Board on Preliminary Education for the six medical colleges in Chicago. The suggestion was unanimously approved, and the Secretary requested to make mention of the matter in his published report for the purpose of bringing it before those interested.

The auditing committee reported that it had examined and audited the following accounts, amounting to \$2,024.81, had found the same to be correct, and recommended that they be paid:

Salary of Secretary.....	\$625 00
Clerical services.....	850 00
Traveling expenses of Secretary and Members....	201 56
Postage	144 00
Expressage	55 70
Telegrams.....	20 30
Books, journals, etc.....	90 10
Printing and stationery.....	15 00
Vaccine virus....	13 50
Incidentals	9 65

\$2,024 81

The Secretary reported that 18 candidates had presented themselves for examination, of which number five withdrew before completing the answers to any of the sets of questions; and that upon tabulating the ratings, of the remaining 13 none were found to have attained the required minimum of 80 per cent. of

correct answers. Following are the schedules of questions submitted:

EXAMINATION IN ANATOMY—BY W. A. HASKELL, M. D.

- 1st. Give the minute anatomy of bone.
- 2d. Describe the astragalus, and give its articulations.
- 3d. With what bones does the ulna articulate?
- 4th. Describe the ligaments of the elbow joint.
- 5th. Describe the biceps of the arm, giving its relation to the nerves by which it is supplied.
- 6th. Name the muscles involved in fracture of the radius near its center, and describe their action.
- 7th. Describe the vessels of the liver.
- 8th. Name the arteries forming the circle of Willis.
- 9th. Describe the superficial and deep palmar arches.
- 10th. Describe the Eustachian tube.
- 11th. Describe the kidneys.
- 12th. Give the anatomy of the inferior carotid triangle.
- 13th. Give the distribution of the fifth cranial nerve.
- 14th. Give the relations of the brachial artery, vein and nerve.
- 15th. Name the structures wounded by a ball which entered the right side about four inches from the median line of the spine, and on a level with the center of the first lumbar vertebra, and traversed the body, making its exit on a level with the eighth rib and ten inches to the left of the median line of the spine.

EXAMINATION IN PHYSIOLOGY—BY JOHN MC LEAN, M. D.

- 1st. What is physiology?
- 2d. Is digestion a simple or complex function?
- 3d. What are the natural solvents for the food?
- 4th. Is the bile a secretion or an excretion?
- 5th. Name the chief constituents of the blood.
- 6th. What is the source of its white corpuscles?
- 7th. What is the relative frequency of the heart-beat and the respiratory act?
- 8th. Does urea exist in the blood in health, or is it manufactured in the kidney?
- 9th. If the renal function is temporarily suspended what surfaces may eliminate the urinary salts?
- 10th. What is the function of the cerebellum?
- 11th. Give the physiology of menstruation?
- 12th. How is the ovum nourished prior to the formation of the placenta?
- 13th. Describe the function of the lymphatics.
- 14th. What are the sources of heat in the animal body?
- 15th. What is the average normal human temperature, and what is the range in health?

EXAMINATION IN CHEMISTRY—BY A. L. CLARK, M. D.

- 1st. What is an elementary body?
- 2d. Name ten elementary bodies, and give their chemical symbols.
- 3d. Define specific gravity.
- 4th. What is the use of the hydrometer?
- 5th. At what temperature Fahrenheit is water most dense?
- 6th. What are the properties of chlorine?
- 7th. What elements chiefly constitute common air, and in what manner are they associated, chemically or mechanically?
- 8th. What medical substance is represented by the chemical symbols KI?
- 9th. What metal forms the base of common clay?
- 10th. What element composes the principal bulk of plumbago, and name some other substances of which it is chief constituents?
- 11th. What is produced by the addition in solution of six parts acid tartaric to eight parts sodic bicarbonate?
- 12th. In what manner does the leavening or lightening of dough by yeast differ from the same accomplished by baking powders, and which process is most destructive to the virtues of the flour?
- 13th. What effect will usually be produced by the administration of a tablespoonful of Na Cl?
- 14th. What are the principal chemical elements found in milk?
- 15th. What is an acid; a salt; a base; an alkaloid; an alkali; an alcohol; a compound ether?

EXAMINATION IN GENERAL PATHOLOGY—BY R. LUDLAM, M. D.

- 1st. What is the difference between a fever and an inflammation?
- 2d. Why do we distinguish predisposing from exciting causes of disease?
- 3d. Describe and define a cachexia.
- 4th. What is meant by the "latent period" of a disease?
- 5th. What is chloro-anæmia?
- 6th. Name the most prominent of our epidemic diseases.
- 7th. Give the chief and common characteristics of malignant disease.
- 8th. Explain the clinical significance of a hyper-thermal temperature.
- 9th. What is the import of glycosuria in malarial fevers?
- 10th. With what particular diathesis are cardiac lesions most frequently associated?

EXAMINATION IN THE PRACTICE OF MEDICINE—BY JOHN MC LEAN, M. D.

- 1st. Give the pathology, symptoms and treatment of empyema.
- 2d. What are the diagnostic symptoms of intestinal invagination?
- 3d. In what various ways may an attack of pneumonia terminate?
- 4th. Describe typical cases of measles, chicken-pox, small-pox, so as to indicate their differential diagnosis.
- 5th. Give the pathology, symptoms and treatment of typhoid fever.

- 6th. What precautions are necessary during the treatment of acute rheumatism with reference to complications or sequelæ?
- 7th. What are the symptoms and usual results of cerebral hæmorrhage?
- 8th. Give the symptoms and treatment of croup.
- 9th. How would the scrofulous diathesis modify your treatment in an acute inflammatory attack?
- 10th. What is the essential pathological condition in *tabes mesenterica*? Indicate the general treatment.
- 11th. What are the symptoms of acute gastritis?
- 12th. What are the predisposing causes of Bright's disease?
- 13th. Give the symptoms and treatment of sunstroke.
- 14th. Give the symptoms and treatment of bronchitis.
- 15th. What is understood by the self-limitation of diseases?

EXAMINATION IN SURGERY—BY W. A. HASKELL, M. D.

- 1st. Describe the mode of pus formation.
- 2d. What are the uses of pus?
- 3d. What is the distinction between septicæmia and pyæmia?
- 4th. What are the complications of abscesses?
- 5th. Give the symptoms of gangrene.
- 6th. Define a burn of the second degree, and indicate its treatment.
- 7th. Give the treatment of lacerated wounds.
- 8th. Give the anatomy of epithelioma.
- 9th. Describe Teale's method of amputating, and name the advantages and disadvantages it presents.
- 10th. Give the relative advantages of the circular and the flap modes of amputating.
- 11th. What are the principal causes of death after amputation?
- 12th. Describe venesection upon the median basilic vein.
- 13th. Give the differential diagnosis of phimosis caused by gonorrhœa from that caused by subpreputial chancre.
- 14th. Describe the ligation of the radial artery in the forearm.
- 15th. Give the diagnosis of strangulated hernia.
- 16th. Give the differential diagnosis of fracture of the neck of the femur and of dislocation of that bone.

EXAMINATION IN OBSTETRICS—BY A. L. CLARK, M. D.

- 1st. What should be done in case of hæmorrhage or flowing after the birth of the child?
- 2d. What are the functions of the placenta?
- 3d. What dangers attend the mother in twin labors?
- 4th. What dangers to the mother and what to the child in breech presentations?
- 5th. Under what circumstances is it proper to administer ergot during parturition?
- 6th. What treatment is necessary in presentation of the shoulders?
- 7th. Give the signs of pregnancy in the order in which they occur, and state what is the first positive sign.

- 8th. What should be done in case of prolapse of the cord?
- 9th. What are the principal fontanelles and what is their shape?
- 10th. How can you determine a hand from a foot presenting at or near the superior strait?
- 11th. Give pathology and prognosis in cyanosis.
- 12th. To what height in the abdomen does the uterus rise during the fifth month of pregnancy?
- 13th. Why does it usually descend during the last two weeks of pregnancy?
- 14th. Name all the female organs of generation.
- 15th. In what manner is septicæmia made likely to follow parturition, and in what way should it be guarded against?

EXAMINATION IN GYNÆCOLOGY—BY R. LUDLAM, M. D.

- 1st. What is the depth of the normal unimpregnated uterus?
- 2d. What is the most frequent lesion in uterine leucorrhœa?
- 3d. What form of nervous derangement is most likely to depend upon ovarian disease?
- 4th. What three diseases are apt to cause anchorage, or flexity of the womb?
- 5th. What is the source of danger from pelvic hæmatocele?
- 6th. What conditions of the rectum predispose to pelvic disorders in woman?
- 7th. What are the causes and symptoms of laceration of the uterine cervix?
- 8th. What is the mode of operating for stone in the bladder of woman?
- 9th. What are the sources of poisoning in puerperal septicæmia?
- 10th. What do we mean by sub-involution of the uterus?

EXAMINATION IN MATERIA MEDICA AND THERAPEUTICS—BY JOHN H. RAUCH, M. D.

- 1st. Define (a) Materia Medica; (b) Therapeutics.
- 2d. Describe, briefly, the various methods in which medicines may be introduced into the system.
- 3d. Define topical remedies, and name some of the more important ones.
- 4th. Name some of the evacuants, and state how they act.
- 5th. What are the principal medicinal agents indigenous to Illinois?
- 6th. Write prescriptions embracing the following articles, and state the indications for each: R No. 1:—Sulphate of quinine and sulphate of iron. R No. 2:—Fluid extract of ergot and tincture of opium. R No. 3:—Fowler's solution. R No. 4:—Oil of turpentine. R No. 5:—Chloride of ammonium.
- 7th. Describe the therapeutic uses of the iodides of potassium and ammonium.
- 8th. Give the doses of fluid extract of digitalis; of podophyllin; of salicylic acid; of iodoform; of proto-iodide of mercury; of

fluid extract of gelsemium; of arsenious acid; of sulphate of atropine; of alum; of bromide of potassium.

- 9th. What are the chief alkaloids of opium; of belladonna; of nuxvomica; of aconite; of Calabar bean?
- 10th. Write three different prescriptions—for diarrhoea; for pneumonia; for malarial fever—stating the different stage of character of the disease, or other indications, intended to be met by each prescription.
- 11th. What is hydrate of chloral; its uses; dangers? To what is it antidotal?
- 12th. Name, and give the doses of the different official preparations of opium.
- 13th. What are the principal anti-pyretics, and their modes of use?
- 14th. How do they act, and what conditions indicate their employment?
- 15th. What are anthelmintics? Mention the doses of three or more different ones.

EXAMINATION IN HYGIENE—BY JOHN H. RAUCH, M. D.

- 1st. What is a zymotic disease?
- 2d. Name the principal preventable diseases, in the order of their greatest prevalence in Illinois.
- 3d. What is the most common medium of diffusion of the poison of enteric, or typhoid fever; and in what way may the spread of this poison be effectually prevented?
- 4th. What are the chief sources of water pollution, and what diseases are caused by a polluted water supply?
- 5th. In a case of scarlet fever, when would it be prudent to permit the convalescent to mingle with others, and what precautions should be first enforced?
- 6th. During the prevalence of an epidemic of a contagious or infectious disease, what duty does the physician owe to the public and to his *clientele*?
- 7th. Within what distance of a well is a privy-vault, cesspool, or other subterranean storage of decomposing animal and vegetable matter, dangerous, and why?
- 8th. What are disinfectants; how are they used, and for what purposes?
- 9th. Indicate, briefly, the evils which should be guarded against in behalf of the health of school-children?
- 10th. What are the chief causes of the excessive mortality of infants and children under five years of age, and how may they be largely remedied?
- 11th. To what is trichiniasis due, and how may it be prevented?
- 12th. What diseases are caused by a wet, undrained soil?
- 13th. What effect would general sub-soil drainage produce upon temperature, atmospheric humidity and wind movement?
- 14th. What is the agency of vegetation upon health?
- 15th. Describe, briefly, the sanitary conditions which should obtain in and about a dwelling-house.

EXAMINATION IN MEDICAL JURISPRUDENCE—BY JOHN H. RAUCH, M. D.
[FORENSIC MEDICINE.]

- 1st. What is understood by medical jurisprudence or forensic medicine?
- 2d. A body is found upon a railroad track, mangled by the wheels of a train. How could it be determined whether the injuries were produced before or after death?
- 3d. In a case of suspected infanticide, what proof would be afforded by an examination of the lungs of the infant?
- 4th. What is the difference between abortion and miscarriage?
- 5th. Where a person knowingly communicates a contagious disease to another, and death results therefrom, can the law take cognizance of the facts; and if so, how?

As the published condition of these examinations requires 80 per cent. of correct answers in each of the first ten branches, and this had not been reached in any case, none of the candidates were adjudged entitled to a certificate, and the fees for examination were ordered to be returned.

On motion of the Secretary, the Board finally adjourned at 1 o'clock p. m.

ARTICLE V.

CHICAGO MEDICAL SOCIETY.

The meeting of April 16, 1883, with Dr. D. W. Graham in the chair, was the largest attended meeting since that of four years ago, when Dr. Cutter, of Boston, delivered his lecture on The Diagnosis of Syphilis by Examining the Blood with the Microscope. About 100 members and guests were present upon each occasion.

Drs. F. D. Porter and W. H. Wilson were elected to membership, and Dr. Robert Randolph, graduate of Bellevue, April 1879, proposed for membership by Drs. T. W. Miller and D. A. K. Steele.

Dr. Edmund Andrews first gave a brief and practical lecture on Litholopaxy, and exhibited a large calculus that he had crushed at one operation, in a patient's bladder, that P. M., by Bigelow's method, which was unattended by pain to the patient.

Dr. E. F. Ingals had prepared a very learned paper on the Treatment of Emphysema, which was read by Dr. W. L. Dorland.

Dr. Andrews moved, duly seconded, that discussion on Dr. Ingals' paper be postponed until the next meeting, as they had another scientific paper of considerable length to listen to this evening. The motion prevailed.

Dr. Wm. T. Belfield then proceeded to give a running commentary on Micro-Organisms in Disease, by exhibiting with a lantern and screen some thirty micro-photographs that were used to illustrate the recent Cartwright Lectures. The doctor consumed about an hour and a quarter in talking on this most interesting theme, during which the following named organisms were brought into view and dilated on :

1. Mole fungi, discovered in 1871, called *ætomices bovis*, although but 19 cases have been reported; found in man up to last August, in Europe.

2. Chromidia, or the flower part, which later develops to a seed.

3. Micrococci, as appears in septic poisoning as the rod bacillus; as found in hay; and the anthracis bacillus as found in animal blood.

4. Anthrax bacilli from kidney (rod-shaped).

5. Anthrax bacilli from liver.

6. Thread-growing bacilli in the blood.

7. Thread, still more magnified, with spores inside of threads.

8. A mass of foreign bacteria with threads and rods.

9. Bacilli from erysipelatous patient (supposedly so).

10. Section of heart-muscle from pyæmia (magnified 100 diameters); this represents a vessel plugged with micrococci.

11. Abscess from kidney from a case of ulcerous endocarditis.

12. Bacteria found in a malignant pustule on the hand.

13. Other forms of micrococci into fours, etc.

14. Section of kidney from a case of small-pox.

15. Piece of same kidney much more magnified.

16. Bacillus of typhoid-fever-spleen, liver and kidney.

17. Same case of typhoid; more bacilli, more fully magnified.

18. Bacilli from pneumonia.

19. Bacilli from kidney in case of diphtheria of bladder.

20. Bacilli again taken from two forms of pyæmia.
21. Bacilli similar to that of anthrax, found in septicæmia.
- 22 and 23. Others similar, found in malignant œdema; found in spleen.
24. Bacilli, found in every cadaver 24 to 36 hours after death in warm weather.
25. Spirillum of recurrent fever or relapsing fever.
26. Tubercle bacilli of retro-peritoneal gland.
27. Section of the skin in a case of leprosy (bacilli rarely occur in this disease).
28. *Filaria sanguinis hominis* (a worm).
29. The worm enlarged, found from 5 to 6 P. M. in a patient who had chyluria, to 5 to 6 A. M.; they are very active, 80 to 100 are found in motion in a drop of blood.
30. The trichina—also *filaria*.
31. *Filaria* again, similar in structure to the trichina.

Dr. D. R. Brower moved that Dr. Belfield receive a vote of thanks for his interesting lecture that evening, which was an unanimous expression, followed by applause.

Regarding the delegates to the Illinois State Medical Society, upon motion of Dr. E. Ingals, the secretary was authorized to fill out alternates' certificates for vacancies occurring.

As the society is entitled to 42 delegates to the State Society, a motion of Dr. E. H. Thurston, that to facilitate matters, those desirous of attending should send their names to the secretary, was also carried, but few responded.

The following were voted delegates to that body:

Drs. P. M. Woodworth, D. R. Brower, J. A. Robison, Emma F. Gaston, Wm. P. Verity, E. H. Thurston; the list not yet being completed.

The following delegates to the American Medical Association were then nominated and elected:

Drs. Truman W. Miller, Arthur R. Reynolds, Simon Strausser, W. L. Dorland, Ephraim Ingals, Wm. T. Belfield, Philip Adolphus, A. B. Hosmer, Frank S. Johnson, T. W. Brophy, H. P. Newman, Christian Fenger, L. H. Montgomery, Chas. T. Parkes, F. H. Martin, Edwin Powell, D. W. Graham, E. F. Ingals, R. E. Starkweather, W. H. Curtis, G. C. Paoli.

Dr. L. H. Montgomery moved that a committee be appointed to confer with the passenger departments of the different railroads leading to Peoria and Cleveland relative to rates for delegates, and it was so ordered. Upon motion of Dr. N. S. Davis, the President and Secretary were appointed the committee.

Dr. E. Ingals, chairman of the committee appointed at the annual meeting to consider the suggestions embodied in the report of the secretary, presented the following:

TO THE CHICAGO MEDICAL SOCIETY:

Your committee to whom was referred the recommendations of your secretary, contained in his annual report, beg leave to report as follows:

1st. The proposed amendment to the constitution, which was to add a second vice-president to the officers of the society, has already been adopted, and requires no comment.

2nd. It is desirable that our membership should embrace every physician of good standing in the city, and as all names are submitted to the scrutiny of the committee on membership, it cannot matter by whom they are recommended.

3rd. We would recommend that the society provide for the publication of a brief history of its existence, with its constitution, and present list of members, with the date and place of their graduation.

4th. We deem it unwise for the society to add an insurance company as an auxiliary to its scientific purposes.

5th. We would recommend that a committee be appointed to obtain a charter for the society under the statutes of the State. This would perhaps add something to its reputation and perpetuity, and enable it to hold property in its corporate capacity.

6th. We would advise that the surplus money in the treasury be invested at interest, to serve, with future accumulations, as a fund by which we may ultimately obtain and own a permanent home for the society, and perhaps for some other kindred institutions.

All of which is respectfully submitted.

E. INGALS,	} Committee.
D. W. GRAHAM,	
R. G. BOGUE,	

Discussion being in order, Dr. E. Andrews argued at some length upon that portion of the report regarding a home for the society, etc., and concluded by moving that it be accepted and placed on file.

Dr. N. S. Davis thought it best to defer any further discussion until a future meeting, for he thought, as a rule, incorporated medical societies were liable to fall through in a few years. He moved as an amendment to the above motion, that the report be laid on the table for the present. The amendment was accepted and carried.

Dr. R. E. Starkweather suggested that in the notices on the next postal card announcements it should be stated that the quorum of delegates to the State Society had not yet been filled. It was so ordered.

The society adjourned at a late hour.

L. H. M.

The following is a partial list of members present :

Graham, Bettman, B., Elliott, Bates, Curtis W. H., Gaston, Mercer, Gradle, Engert, Potter, MacArthur, Martin, Steele, Starkweather, Coly, Davis N. S., Cook A. H., Colburn, Reynolds A. R., Adolphus, Dorland, Ingals E., Lescher, Brophy, Chew, Bidwell, Powell, Best, Randall, Weller, Montgomery L. H., Andrews E., Tucker D. M., Brower, Paoli, Johnson F. S., Burt, Tilley, Purdy, Robison, Verity, Thurston, Strausser, Stowel, Hobbs, Merriam, Fenger, Ingals E. F., Tagert, Hosmer, Hayes, Miller T. W., Woodworth.

The following visitors were in attendance :

Herbert C. Jones, M.D., Cerro Gordo, Ill.; J. W. Wier, M.D., Oswego, Kan.; J. S. Turner, M.D., Atalissa, Iowa; J. G. Langguth, Chicago; I. J. Smith; Harlan, Iowa; J. F. Sharp, J. T. T. Stoddard, A. Leigh, Highland, Kansas; W. F. Wakeman, City; Wm. Hoskins, City; A. T. Steele, M.D., Ashmon, Ill.

PROF. W. E. QUINE has resigned the chair of *Materia Medica* in Chicago Medical College, and accepted the chair of Practice of Medicine in the College of Physicians and Surgeons.

ARTICLE VI.

MICHIGAN STATE BOARD OF HEALTH. (Reported for the CHICAGO MEDICAL JOURNAL AND EXAMINER.)

The Michigan State Board of Health met at its office in Lansing, Mich., on April 11, 1883, the following members being present: Hon. John Avery, M.D., of Greenville; Arthur Hazlewood, M.D., of Grand Rapids; Hon. C. V. Tyler, M.D., of Bay City; Henry B. Baker, M.D., Secretary. Dr. Avery was made President *pro tem*. The minutes of the last two meetings of the Board were read and approved. The secretary read a quarterly report of work in the office of the Board, showing the amount of proof read; meteorological and other reports received; compilation of material effected; bulletins, documents, circulars, blanks and reports distributed; correspondence performed, etc.; being a brief summary of the work performed in the office of the Board. The secretary also presented a *résumé* of the work performed by other State Boards of Health, and a review of sanitary legislation in other States. He stated that in Michigan the House of Representatives had passed a bill, which was likely to become a law, practically repealing that section of the act establishing the State Board of Health, which provides that the secretary of the State Board of Health shall be the superintendent of vital statistics. If the bill becomes a law, the vital statistics will hereafter be entirely under the control of the Secretary of State. The secretary referred to the alarming presence of small-pox in Nashville and New Orleans, and suggested that Michigan was in danger, because of the approaching time when Southern people flock to the numerous summer resorts in Northern Michigan. The secretary was instructed to correspond with the National and other boards of health, and to do all that can be done to prevent the introduction of small-pox, by quarantine and inter-State inspection. The secretary was authorized to send to health officers in the vicinity of health and summer resorts information of the existence of small-pox in the places whence some of their visitors come; also to send the same notice to health officers of cities especially exposed to introduction of the disease.

The secretary presented an account of sickness caused by eating salted pork. The sickness was attended by burning in the stomach and abdominal tenderness. Some of the meat was fed to four cats. The symptoms in the cats were expansion of the pupils, vomiting, great thirst, and tenderness of the muscles. Diarrhoea was not present. Three of the cats died, the fourth one being barely able to walk after one month. They were attacked twelve hours after eating the meat. A partial microscopic examination of some of the meat by Prof. T. J. Burrill, of Champaign, Ill., disclosed nothing within the meat to have caused the illness, but on the surface of the "lean" portions there was found a micrococcus enormously numerous, as well as some fungous developments of a mould-like kind, sparsely present. The micrococcus was of a new variety, entirely distinct from that of "hog cholera," which latter was not detected in the specimen. It is not known whether the organism was on the pork when it was used for food, and it has not yet been determined whether it is now alive. Culture experiments will be instituted to determine that point. It is quite devoid of motion, and has a less dense or firm appearance than most of its congeners. It takes the ordinary aniline violet stain. Usually two were connected in a figure 8 form; rarely more. The secretary presented statements from Mr. Love, clerk of the board of health of Grand Rapids, showing successful prosecution for selling diseased meat in several cases.

In the afternoon session, Prof. R. C. Kedzie, formerly a member of the State Board of Health, made a report of his attendance at the meeting of the Sanitary Council of the Mississippi Valley, at Jackson, Miss., April 3, 1883, at which he represented the Board. He reported that the meeting was unanimous in urging the continuance of the National Board of Health, and the system of river and railroad inspections, to insure the prevention of the spread of epidemic diseases, without the obstruction of travel and commercial relations between the States, and of such surveillance of the port of New Orleans as will give to the several State and important municipal health authorities represented in the Council, prompt and reliable information of the occurrence and progress of an epidemic disease in that city. Plans for such work were

discussed and adopted, and it was understood that in case of the failure of the national government to carry it out after June 2, beyond which time the National Board of Health will be unable to sustain it, unless President Arthur places the \$100,000 appropriation at its disposal, it will become important and necessary for the several States endangered to supply, in some way, the money to carry on the work. Delegates from Mississippi, Arkansas, and other States, pledged certain amounts, in case it proves to be necessary. (Michigan has never made an appropriation available for use in preventing the introduction of contagious diseases.) Dr. Kedzie received a vote of thanks for the able manner in which he represented the Board at the meeting.

This being the annual meeting of the Board, the election of a President for the ensuing two years resulted in the election of Hon. John Avery, M.D., of Greenville.

The secretary presented an account of the death of a railroad employè by being caught in a "frog," together with a copy of a bill now before the legislature, providing for a wedge of hard wood, or other substance of equal utility, in all "frogs" of an angle of less than 45 degrees. He described the method devised by a prominent railroad man, of tamping hard coal and cinders in the frog. This method is not dangerous to the traveling public, and the wedge of hard wood, by its liability to be misplaced, might throw a train from the track and cause many deaths.

The secretary was authorized to prepare a blank form for the use of health authorities in Michigan in reporting the occurrence of a disease dangerous to the public health, to the State Board of Health.

Invitations to hold sanitary conventions at Muskegon and Ionia were accepted, the dates to be hereafter decided upon.

The newly elected President announced the following

STANDING COMMITTEES.

1. Epidemic, Endemic and Contagious Diseases.—H. F. Lyster, M.D.
2. Sewerage and Drainage.—H. F. Lyster, M.D.
3. Food, Drinks, and Water-Supply.—V. C. Vaughan, M.D.

4. Buildings, including Ventilation, Heating, etc. — Jno. Avery, M.D.
5. Climate, Geology, Topography, etc.—Henry B. Baker, M.D.
6. Disposal of Excreta.—John H. Kellogg, M.D.
7. Poisons, Explosives, etc.—V. C. Vaughan, M.D.
8. Occupations, Recreations and Habits.—J. H. Kellogg, M.D.
9. Relations of Schools to Health —Jno. Avery, M.D.
10. Sanitary Survey.—C. V. Tyler, M.D.
11. The Death-Rate as Influenced by Age. — Henry B. Baker, M.D.
12. Legislation.—C. V. Tyler, M.D.
13. Finances of the Board.—Arthur Hazlewood, M.D.
14. Mental Hygiene.—Arthur Hazlewood, M.D.
15. Diseases of Animals.—Henry B. Baker, M.D.
16. Relations of Preventable Sickness to Taxation.—John H. Kellogg, M.D.

These nominations were confirmed by the Board.

Dr. Baker, as committee on diseases of animals, reported an effort being made in the legislature to secure an appropriation for the State Board of Cattle Commissioners. Dr. Tyler reported the presence of a bill in the legislature prohibiting putting sawdust into streams.

Dr. Hazlewood reported that he had frequently seen old oil barrels being collected in Grand Rapids, from which the brand had not been erased, and often, on new invoices of oil, the inspector's brand was so indistinct that the date of inspection could not be deciphered.

The secretary was requested to prepare a memorial to the President of the United States, petitioning that he place the \$100,000 appropriation in the hands of the National Board of Health.

The Board performed much routine business, and adjourned to meet at Reed City, Michigan, April 26 and 27, 1883, at which time there will be a sanitary convention at that place under its auspices.

ARTICLE VII.

CHICAGO PATHOLOGICAL SOCIETY. Stated Meeting, Dec. 11th, 1882. Dr. H. M. Lyman, President, in the Chair.

Dr. G. Frank Lydston, late resident surgeon to Charity and State emigration hospitals, New York, and now lecturer on genito-urinary disease in the College of Physicians and Surgeons of Chicago, read a paper entitled, "A Contribution to the Hereditary and Pathological Aspect of Vice," which will be found in the February number of the JOURNAL. The society had turned out in full, and several of the members took place in the following discussion.

DISCUSSION.

Prof. E. L. Holmes said that this was certainly a great subject. He had been brought in contact with a large number of criminals, and it was evident that just as we come across cases of color-blindness, we similarly meet cases of moral blindness. The organization might be faultless otherwise, still there was in many criminals a deficient appreciation of the morality of certain acts, and that deficiency seemed rooted in their constitution. He related the instance of a banker who never could take a liking to anything. He cited instances of perversions of taste, and looked upon this conjointly with color-blindness as next to incurable, and he thought this applied to a large class of criminals. In our incapacity to abolish crime we had to bear with it.

Prof. J. J. M. Angear, of the College of Physicians and Surgeons, who was present by invitation, was asked to take part in the discussion, and made the following remarks: He had had a large experience in the treatment of criminals in the capacity of surgeon to a penitentiary for many years. He denied the inferiority of mental power ascribed to that class by so many writers. He had often been surprised at the proficiency of many of them in languages, the scriptures, etc. He understood that the sulci of the brain were evidences of an increase of the gray matter and consequently represented an increase of force generally in the individual. In cases of this kind, if the nature or

will of the individual became depraved, the greater would the criminal be. He believed in intellectual criminals, that is in criminals who kept abreast of the progress of civilization. Thus, since the common poisons were so readily detected, some criminals would select the rarer ones; after the microscope had revealed the fact that the blood of a dog resembled that of man some murderers would call the blood on their clothes dog's blood, etc. Although the inheritance of pauperism had not been brought up before the society, it was one of the most manifest instances of heredity. Some wealthy people, suddenly deprived of all their means, generally took but a short time to rise again, while families of paupers had often been continued for innumerable generations. As to mental impressions made by the mother on the fetus, he thought there was a little of truth in it, but heredity mostly depended on the impressions made on the spermatozoa and ova while they were in process of formation in the parents. And reformations were not so liable to be transmitted to the progeny as were the results of early education in the parents. Hence, we should bear in mind that young girls and boys in the early years of their life were forming the minds of the coming generation, and that their education on that account should on that account receive greater care. He related instances of rabid temperance men, born of a mother who abhorred liquor, and of a drunkard father, to show that inheritance might sometimes be one-sided. As to prostitution, he believed that it was probably often transmitted from father to daughter, and that its burden should not rest on the female alone.

Dr. Lewis said that he was not entirely satisfied with the treatment of the subject under consideration, because it had not been explained why there was in certain individuals a lack of moral sense which existed in others, or why should an inferior cerebral development exist in some individuals.

Dr. Odelia Blinn talked at some length on the subject of prostitution, with special reference to a case now before the grand jury. She said she did not believe in calling prostitution a sin as long as it was looked upon as such only by men in their appreciation of women. What was legitimate in one could not be a sin in the other.

After a few more physicians had spoken on the subject, Prof. H. M. Lyman said that he was well aware of the great difference which existed between various intellects, and quoted the statement of a celebrated writer to the effect that there was a greater difference between the higher and lower races of man than between these and the lower animals. Yet, this difference was not one of configuration, but one which should be looked for in the brain mostly. Criminals had certain perceptions of physical relations, but it was probable that they did not have the power of seeing certain moral relations, and in this must consist the greatest difference between men. There was a general resemblance in brains, corresponding to a general sense of morality in mankind. The only remedy applicable to vices, besides repressive law, should consist in making up for a deficient moral sense by proper moral education. Children should be trained into morality. This did not mean religious, dogmatic or theological teaching, but the inculcation of a moral habit. It was a grave error to confine education in the public school to intellectual training only, and a reform was needed in that direction.

EXPLOSIVE MIXTURES OF MEDICINE.—SEMINARIO FARMACEUTICO.

1. Hypophosphite of lime, chlorate of potash and sulphate of iron, mixed in equal proportions, are explosive.
2. A solution of one part of chromic acid and two of glycerine.
3. Chlorate of potash and dental powders containing carbon explode in the mouth.
4. A pilular mass containing permanganate of potash, mixed with vegetable extracts and iron, easily inflames.
5. Chlorate of potash or the permanganate or the other explosive substances must not be triturated with glycerine.—*Rev. Scienc. Med.*—*Rev. Md. Quirurgica*.

Chlorate of potash and tannin explode if triturated, as do chlorate of potash and sugar. Iodine or an iodide and a nitrate may explode.—*Virginia Med. Monthly*.

Domestic Correspondence.

ARTICLE VIII.

ELGIN, MAY 3, 1883.

EDITORS MEDICAL JOURNAL AND EXAMINER:

Mrs. M., æt. thirty-five years; a widow for several years; never had any children. This lady several months ago applied to me for treatment for a uterine difficulty. Her history was that for nine years she had been undergoing medical treatment from several different physicians of the place, continually growing worse, and at last pronounced incurable. I examined the womb with the speculum, and found the organ considerably enlarged and retroverted, the fundus lying in Douglas' pouch. The mouth of the uterus was as nearly closed as possible. It was with difficulty that I could introduce the smallest-sized probe. She complained of a great deal of pain in the lower part of her back. Her catamenial flow was on her a good portion of the time, as often as every two weeks, and between these spells she would have a show of sanious discharge. My treatment of the case was to dilate the mouth of the uterus and restore the organ to its normal position. This I succeeded in doing with Ellinger's dilater and a uterine 'sound. I had to use the dilater several times, at intervals of two weeks, to permanently open the os uteri. This constituted the principal local treatment. The constitutional treatment was nutritious food, rest, ergot and iron, with occasional doses of potassic bromide. Cured.

H. ROSENCRANS, M.D.

Reviews and Book Notices.

ARTICLE IX.—A TREATISE ON THERAPEUTICS, comprising Materia Medica and Toxicology, with especial reference to the Application of the Physiological Action of Drugs to Clinical Medicine. By H. C. WOOD, Jr., M.D., Prof. of Materia Medica and Therapeutics in the University of Pennsylvania, etc., etc. Fourth edition. Revised and enlarged. 8vo, pp. 736. Philadelphia: J. B. Lippincott & Co. 1882. Chicago: Jansen, McClurg & Co.

This is one of the leading text books on the subject. It is divided in two very unequal parts, viz.: Drugs, and Forces, by which is meant heat and cold, and electricity. The drugs are divided into systemic and non-systemic remedies, the latter being understood of antacids, disinfectants, etc. Systemic remedies comprise general remedies, like the tonics and antispasmodics, alteratives, etc., and local remedies like cathartics, diuretics, emollients, etc. The propriety of such divisions is not very obvious; for instance, to call a poultice a systemic remedy and call an antacid like lime a non-systemic agent, does not seem rational, at least it is not clear.

The author undoubtedly possesses a great deal of discriminative judgment, but presents together the most opposite views of the various experimenters, reserving his decision when their experiments seem not to legitimate their views. The large proportion of the book given to such contradictory statements make the general ignorance of the therapeutic action of drugs quite obvious. One would wish to read more of the author's experiments and of his conclusions, for on such debatable subject innovations are of more value than mere conservative views.

In this, perhaps, the work under consideration is susceptible of much improvement. There is, for instance, the unpardonable omission of the metric system in stating the doses of the various drugs. Very little is said as to the mode of administration of unpalatable medicines, like opium, quinine, etc., that is, so-called elegant preparations, are never alluded to. Many of the latest applications of certain old drugs have been overlooked; for instance, the use of quinine as a stimulant, by so many people, in lieu of alcohol, etc. Under the head of Forces, one vainly expects to find Massage and the Swedish movement treated of. But the strangest inconsistency of the author is his partial disbelief in the dependence of all infectious diseases on organic germs. But as there are so few reliable works on Therapeutics, and that valuable original contributions like Bartholow's Antagonism, appear once in a decade at best, we take pleasure in recommending the use of the present volume to students, and its correction and improvement to the author. H. D. V.

ARTICLE X.—MANUAL OF GYNÆCOLOGY. Hart and Barbour.
Two Vols. (Wood's Library, January, 1883.)

In the preface of this work, the authors avow their belief in anatomy, physiology and pathology of the tissues and organs under discussion, as being the foundation of a clinical text-book. The reader of these volumes will hardly fail to remark the well-ordered manner in which the authors' belief is exemplified: Anatomical descriptions are based upon the results obtained by the authors and different observers employing frozen sections; structural anatomy and physics of the pelvis are clearly stated; while menstruation and ovulation receive a concise and practical description. Plain and practical directions regarding instruments and methods employed in examinations follow. The slippery-elm test is not mentioned, although a favorite with some American writers.

The diseases of the pelvic tissues, beginning with the peritoneum and connective tissue, are treated of in a systematic and thorough manner; the details of treatment are fully described;

the whole result being the presentation of conclusions and results, with practical points, in a manner easy of access and remarkably clear. The pathology of the lining membrane of the uterus is accurately stated. The common affection known as "ulceration" is described as "chronic cervical catarrh," and the name explained by the microscopic study of recent observers.

Ruptures of the perineum are explained and treated with reference to the physics of the pelvic floor; in uterine displacements from defective support, prolapsus is considered a hernia analogous to femoral hernia.

The operations for vesico-vaginal fistula are fully described and illustrated. An appendix treats of specific disease; chlorosis; etiology of uterine disease; the recording of cases, and a *résumé* of gynæcological literature completes the work.

Quotations from German, English and French literature abound. A brief bibliography heads every chapter.

The volumes are copiously illustrated. While some cuts are obscure, the greater portion are plain, and there are several excellent lithographs. For conciseness, clearness and practical information, the work commends itself to the student and practitioner, and forms a very desirable portion of Wood's excellent library.

E. P. D.

ARTICLE XI.—A TREATISE ON ALBUMINURIA. BY W. H. DICKINSON, M. D. Second edition, 8vo. cloth, pp. 300. New York: William Wood & Co. 1881.

This is the January, 1881, issue of Wood's Library of Standard Medical Authors. It is remarkable for its six beautifully colored lithographic plates, representing various diseased conditions of the kidneys, together with thirty-one wood cuts, in the text. The subject matter comprises chapters on nephritis or Bright's Disease, granular degeneration, lardaceous degeneration, and considerations pertaining thereto.

The pathology of diseases of the kidney is considered at length, and micrographs illustrating the same render the study of the subject so much easier. As to treatment, the author gives a synopsis of that advocated by his predecessors, then he warns

one against bleeding, recommends drinking water to dilute the urine, and restricts the use of nitrogenous food to a minimum. He does not favor the indiscriminate use of digitalis. Purgatives form part of the preventive treatment of nephritis. Iron is recommended and gallic acid discarded. Paracentesis seldom required. Baths are of much benefit.

This is one of the valuable volumes of the series in which it belongs, and will repay the small investment with interest.

H. D. V.

ARTICLE XII.—LECTURES ON DISEASES OF CHILDREN; a Handbook for Physicians and Students. BY DR. EDWARD HEN-
OCH, Prof. in the University of Berlin. 8vo, cloth, pp. 357.
New York: William Wood & Co. 1882. The March is-
sue of Wood's Library.

The value of this manual rests on the extensive experience of the author, which is supported by the timely insertion of reports of cases, and contains much valuable literature found nowhere else. Notwithstanding the contrary anticipation, one finds a number of diseases often met in general practice treated here at length, which are not to be met in more classical works on the same subject. Yet, some diseases are left out purposely, as variola, nor are affections of the eye and ear mentioned, but there are a few pages given to skin diseases.

The treatment recommended is that peculiar to the German school, so well represented in Ziemssen's Cyclopædia; it consists of few but effective measures, and is well adapted for the busy practitioner. Although, perhaps, more valuable in a few respects, it is not at all likely that this book will replace the well known American treatises on the diseases of childhood, partly on account of its being adapted to a so differently constituted people, but at the same time it will remain one of the most desirable books in Wood's Library.

H. D. V.

ARTICLE XIII.—CLINICAL LECTURES ON THE DISEASES OF OLD AGE. BY J. M. CHARCOT, M D., and ALFRED L. LOOMIS, M.D. 8vo. cloth, pp. 280. New York: William Wood & Co. 1881. June No. of Wood's Library.

Gout and chronic articular rheumatism are the diseases treated of by Prof. Charcot, while Dr. Loomis' lectures treat of pneumonia, catarrh, asthma, atheroma, apoplexy, constipation, etc. The introduction gives the history of the subject in an able manner, and is quite interesting, and so is the lecture on the general characteristics of senile pathology. Yet, the prolixity peculiar to French writers is manifest here, and makes the reading of some chapters rather tedious, although eminently erudite. As medical works of this character are quite rare, the publishers deserve the thanks of the profession for issuing this one in such a cheap and accessible form.

H. D. V.

DR. ANDERS reported to the society of physicians at St. Petersburg his results on the treatment of spondylitis with the felt-jacket. He takes first a model of the upper body with plaster Paris, and he has the felt jacket made exactly after this model. He claims superiority for the felt jacket over the plaster Paris jacket of Sayre; and he says that, especially to children, the latter apparatus is not applicable. He has treated fifty patients affected with spondylitis in all stages of the disease. He had some who had abandoned walking for several months. and he says that his felt jackets have been always easily worn and that every case was followed by the most decided success.—*St. Petersburg Wochenchr.*

To remove fish-bones from the throat Prof. Voltolini, at Breslan, recommends a gargle composed of muriatic acid, 4 parts; nitric acid, 1 part; and water, 240 parts. The teeth have to be protected by lard or oil. The fish-bones become flexible and they disappear entirely after a short time.—*Memorabilien.*

Editorial.

MEDICAL EXAMINATIONS BY STATE BOARDS.

The attention of the public, as well as of the profession of this city, has been lately attracted in the columns of the daily press, to the subject of the examination and licensing of practitioners of medicine by State boards. The discussion of the questions connected with this subject was originated by the proposition of the following resolution in the Chicago Medical Society :

“ Resolved, That the public good would be promoted by the establishment of a State board of medical examiners, such board to be entirely separate and independent of all medical colleges; to have the exclusive right to grant license to practice medicine in the State of Illinois, leaving to medical colleges their function of teaching and conferring degrees, but obliging all who in future desire to enter upon practice, and who have not already received license to do so, to go before such board to prove their fitness; and that said board be required carefully to examine all applicants as to their moral, literary, and medical attainments, and only to confer a license on those who are well qualified in all these respects.”

This resolution was finally, after discussion, adopted; and its mover immediately after offered the following, which in its turn also became the sense of the society :

“ Resolved, That a committee of three be appointed by the chair to represent the Chicago Medical Society, and that they be instructed to confer with the Illinois State Board of Health relating to statements contained in the proceedings of its last meeting; and that this society respectfully requests said board to communicate to our committee any facts in the possession of the

board that will enable the committee to prepare its report for the society."

The agitation of this important subject is timely and profitable. Some reform in existing methods is demanded, both by the profession and the public. The united opinion of the two is likely, at no distant date, to accomplish some actual results. It is time to ask, after due consideration of all sides of the question, what is the best and most practicable method of arriving at the desired end?

Whenever there are conflicting interests in a case at bar, it is commonly deemed prudent to compromise, if possible. Here there are interests at stake; grave interests of right and property, but in reality no interests which conflict. The highest interest of all concerned is best conserved by a single course. In deciding as to the proper course, however, it is neither safe nor wise to neglect any of the interests represented.

Thus, for example, the views of the teachers and representatives of the medical schools of the State should be fully ascertained and accorded weight before action be had in so important a case, lest that action be intemperate or partial, and thus fail of its desired end. Certainly these gentlemen are entitled to such consideration. In years, in learning, and in experience as both teachers and examiners in medicine, they have absolutely no superiors in the State of Illinois. Among the thousands practicing medicine in the State, it would be extremely difficult to select one hundred gentlemen who have done more to elevate the standards of their own ranks, and to contribute more largely to the respect entertained throughout the country at large for their contributions to scientific literature.

Nor is this all. The present professional position and fair prospects of the medical men of the Northwest are largely due to their influence. It is safe to say that over one-half of all the practitioners in the State were made such by their professional studies in Illinois schools of medicine. We cannot but express the conviction that it would be simply monstrous for the graduates of these schools, men who left their walls when the college curricula were admittedly less severe, and the requirements less rigid than at present, to favor any radical measures adverse to

the common interests of those who admitted them to the ranks of medicine, and have since jealously guarded the professional reputation and name of the class with which they thus became identified. Looking at the question from this just and broad standpoint, there can be but one view taken of it. Decidedly, the examination and licensing of qualified practitioners should be conducted by a body of men not interested in their preparation for such an ordeal. We do not believe that there is a really respectable medical school in the country which will object to being relieved of this task, a no small addition to the really arduous labors of its teaching corps, always provided there is an equitable and general system of examinations in force, discriminating against no single institution, and rigorously enforcing its rules in the case of applicants from each and every college.

This is an important proviso. For example, it would be manifestly unfair and unjust to propose an examination for graduates of Illinois schools different from that imposed upon graduates of schools not situated in this State. If any discrimination were to be made, it should certainly favor those applying from our home schools. These home schools are entitled, the respectable ones among them at least, to a special consideration. Some of the gentlemen actively identified with their interests, have toiled incessantly for nearly half a century to establish them solidly, to enlarge their reputations, and to make this fourth city in size of the Union, a great medical educational center, not only of the Northwest, but of the country at large. One-quarter of a million of dollars of invested capital is the fruit of an incredible amount of self-sacrifice and victories won over opposition of the most senseless and ignorant character. Nearly one hundred thousand dollars are annually paid into their treasuries, by far the largest part of which is annually re-expended for apparatus and the expensive requirements of high-class medical teaching. The gentlemen engaged in this laborious effort to perfect and enlarge the American system of education in medicine handed down to us by our fathers in medicine, a system both unaided and unobstructed by legislation, though unquestionably and justly benefited in reputation, have not been rewarded by any such large pecuniary returns as would make them the objects of envy to

those not similarly situated. The wealthy among them are few, far fewer than the professional men of wealth not enjoying such a connection. Many of them are financially in very moderate circumstances. What measure of success they have attained, is the reward of the self-sacrificing toil of years. These are considerations which the fair-minded will not ignore. If Illinois is to be so discriminated against by legislation that the young men of the Northwest, ambitious to enter the profession, find it necessary to pass by her doors and to seek their medical education in Massachusetts, or New York, or Philadelphia, let there be, we repeat, an impartial reviewing of the whole question before any irrevocable steps be taken. An unjust law usually defeats itself. Manifestly the only strictly fair and impartial system of examining and of licensing practitioners, would be one operating equally in all States of the Union, in New York as well as in Illinois, in Massachusetts as well as in Iowa.

A board of examiners, authorized to license for practice, and limited in its powers to this State, would not necessarily do all and be all that the dream of a *doctrinaire* might devise. Would there be a scramble for its membership in order to gratify the friends or the enemies of the several schools affected by its operation? Would it be insensible to the influences which have been powerful in the similarly constituted British Examining Boards? Creature of legislation, would it be superior to the corruption of American politics and politicians? Would it surpass the standards of the Illinois State Board of Health, which has, as a matter of fact, examined, passed and licensed under-graduates of Illinois medical colleges? Would it operate, as the last-named body has operated, as the fulcrum of a lever to elevate in public honor and esteem eclecticism and homœopathy, which have thus acquired a legal status and privileges? Would it refuse a license to the illiterate adventurer from a wretched little diploma-mill in Boston, and yet be powerless against the men in this city practicing under false names? Would it exact a fee for its examinations, and eke out a scanty legislative appropriation by subsistence of this sort? What would be the pay of its members? The United States Government lately offered but \$2,500 *per annum* for some

medical experts it needed. Can the State offer more than that to its examiners? Where are the men more just, better trained, wiser in science, and more skilled in medical examinations than those now doing this work, whose medical practice is so small that such a salary offered by the State is a temptation to abandon the former for the latter? Will such a board of examiners be mongrel in constitution, the irregulars disproportionately represented, thus inducing inferior students to graduate from the poorer schools possessing such disproportionate power in license? These are serious questions, and they must be answered. The respectable medical schools of this State would be indeed short-sighted if they did not welcome a just and equitable system of examination, but, stripped of their present powers and with the questions unanswered which are set forth above, they had better dispose of their property at once and invest it in something more respectable and profitable than mimicking a court fool to secure the favor of a prince.

Far better than a mongrel board would be a committee appointed by the State Medical Society of each sect, empowered by State law to examine the candidates of their own persuasion. Then, indeed, the State might license, and license only as thus advised, the physician and surgeon to practice and announce himself to the public only as a physician and surgeon; the homœopathist, only as such; the "physio-medical," the eclectic, *et id omne genus*, only as such.

But even under such a system as this, the poorest students would naturally seek the poorest schools, as offering them a cheaper, shorter, and readier pathway to the privileges of practice. Released from the control and influence of even a mongrel board, the sects would flourish most if the seal of the State were finally set in approval on the licenses furnished each. It is difficult to see how the best schools will fail to be the greatest sufferers under any law. They have indeed achieved, acting solely under the laws ensuring the survival of the fittest, in point of the number of students in attendance upon them, as well as in the matter of professional reputation and professional influence, an unquestioned supremacy. This is so well recognized, that their methods and manners as regards the public, are copied to the very letter by the smaller and inferior schools which aim to be their rivals.

The injustice of a law which operates unequally in different States of the Union, is so manifest that it scarcely requires comment. If a physician be such by virtue of the laws of the State of New York, has the State of Illinois power to disqualify him for practice? If she should attempt this, there can be but little question that an issue will be taken in some case for final presentation at the bar of the Supreme Court of the United States.

We have then a word for those who are interested in this matter—and every member of the profession should be so interested. Let the concurrence of the colleges be secured at the outset. The movement is timely, and may lead eventually to the most desirable results. If there be a medical school in the country, of respectable standing, which objects to the operation of a general system of examination and license, uniform throughout the whole country and impartial in operation, let that school bear the opprobrium which such an opposition will deserve. But if an effort is to be made (and there are indications that it will be made), to empower the Illinois Board of Health to examine and license the graduates of the medical schools of this State, such an effort will awaken the united opposition of the colleges and the large mass of reputable physicians in this State who are in affiliation with them. Before any such power shall be vested in that body, there will be a demand for its reconstruction, which will be loud and emphatic. When the Governor of the State of Illinois, recognizing the influence and numbers of the professional men of the city of Chicago, called together some of its representative members, many of them connected with the medical schools of the city, and requested them to nominate to him one of their number as a member of the State Board of Health, he gave weight to their opinions by appointing their nominee. Doubtless the same men can and will, if occasion arise, make their influence again felt. Before the Illinois State Board of Health is empowered to examine and license the graduates of the medical schools of this city, it will cease to be mongrel in character, or if not, will in its membership represent in due and just proportion the thousands of respectable practitioners in this State, as against the claims of homœopathsists, eclectics, clergymen, lawyers, politicians, and decayed place-seekers of every description.

Translations from Foreign Exchanges.

BY O. STROINSKI, M.D.

THE EFFECTS OF RUSSIAN BATHS.

Scientific researches as to the influence upon the human system of Russian baths, have recently begun, and Tumas. Sasjetsky, Fjalkoffsky, Tarehanoff and others have published their experiments. Dr. Godlewski has recently made extended experiments on two healthy persons for twenty days, with and without the application of heated birch-rods. In all the experiments, the air was not entirely saturated with hot steam, and the examined persons were equally nourished, and had an amount of work to do sufficient to preserve the regular "nitrogen equilibrium." For five days before the first series of experiments, the two persons were thoroughly examined. Then a series of baths was given for ten days without application of birch-rods, after which followed a series of baths with birch-rods for ten other days. After this time, the persons were closely observed for five days. The experiments were made in the following order. The patients having arrived in the bathing institute, 1, the pulse was counted exactly over the radial artery; 2, the number of respirations was determined; 3, they were weighed; 4, the capacity of the lungs was measured with the spirometer (three times); after having undressed, they rested for a few minutes, and then, 5, the temperature in the axilla and the rectum was taken; 6, the force of inspiration and expiration was measured by the masked pneumotometer, the highest numbers being noted; 7, the circumference of the chest was measured with a leathern strip on places which had been marked with nitrate of silver; in front, on the fifth rib,

and on the back at the superior angle of the scapula, the arms being horizontally raised, (a) in regular breathing; (b) in deep inspiration; (c) in total expiration; 8, with the same strip was measured the circumference of the abdomen and of the upper and lower extremities; 9, the muscular force was determined, (a) in the hands by pressing upon a hand-dynamometer; (b) in the feet by pressure upon an oval dynamometer which was fastened to a board; (c) the force of the body was measured by connecting the latter dynamometer with a hook-formed mechanism, the hands pulling the hook. The two persons were then sent to the bathing room to be soaped (middle temperature of the first series being 38.6° Celsius, and of the second series 44.4° Celsius). They washed themselves with warm water (first series 47.95 , and second 45.10 Celsius). Twenty minutes after being soaped, the pulse and respiration were counted, and the temperature in the axilla and the rectum was measured. Then they stepped upon the elevated bank; in the first series but lying on the bank; in the second series being whipped with the birch-rods (temp. 64.1° C.). After this repeated pneumatometric and dynamometric measures were taken. The urine was collected every 24 hours, the specific gravity determined with the urinometer, as also the quantity of nitrogen, phosphoric and sulphuric acids present. The results of these very minutely executed experiments are as follows: 1. The pulse was accelerated. 2. The respiration increased. 3. The circumference and the expansion of the thorax enlarged. 4. The force of inspiration and expiration were diminished. 5. The capacity of the lungs was lessened. 6. The temperature in the axilla and the rectum was higher. 7. The weight of the body was considerably diminished. 8. The circumference of the arms and legs was enlarged. 9. The circumference of the abdomen was diminished. 10. The muscular force in the hands was not very much decreased, but that of the legs and the trunk considerably. 11. The quantity of urine in 24 hours was diminished, but the specific gravity increased. 12. The quantity of nitrogen was considerably larger, as was also the quantity of sulphuric and phosphoric acids.—*Wratsch.*

SOME ACCIDENTS IN OVARIOTOMY.

1. Susanne K., thirty-three years of age, entered the Dorpat hospital with a large abdominal tumor. Some months after her third confinement, she noticed a small movable tumor above the symphysis pubis, which increased slowly. After four years she became pregnant again, and the tumor was now situated on the right side, just below the ribs, and sometimes caused great difficulty in respiration. The woman was well nourished, three months pregnant, and the round tumor was movable, and extended from the umbilicus to the ribs. The abdominal walls being separated by incision, a simple cyst was punctured and the long pedicle secured. Deep sutures were passed through the abdominal walls and the peritoneum. Eight days after the operation, the sutures were removed, and the wound healed per primam. It was covered with adhesive plaster and cotton. On the next day the nurse noticed the cotton to be wet, and the patient complained of pain. The patient was immediately given opium and then etherized. The wound was now seen to have opened in its entire length, and the intestines and a large part of the omentum protruded through the opening. A fibrinous exudation covered the intestines, very difficult to remove. The margins of the wound looked entirely healthy, and as fresh as after the operation. Other sutures were introduced, and left for two weeks. The patient recovered, and the pregnancy was not interrupted.

2. Anna M., twenty-six years of age, noticed a tumor in the abdomen about a year ago. Shortly afterward she became pregnant, and the confinement was normal. Abdominal palpation showed a tumor extending from the symphysis pubis to the umbilicus, and composed of nodes as large as an apple. The vaginal portion was situated on the left side, and nodular tumors were felt throughout the vagina. The uterus was normal and movable, the tumor being moved without difficulty. The diagnosis was multilobular cyst of the left ovary, probably carcinomatous and adherent. In the operation following, the tumor was found to be adherent to the omentum, and intimately connected with the colon ascendens. The pedicle was first secured, and all adhesions to the omentum separated. Then the adherent piece of the

mesocolon was secured by two spring-pincettes, and the intestine excised. Large sponges prevented the entrance of blood into the peritoneal cavity. The tumor was now removed, and the mesocolon united by twenty-three sutures. The tumor was a dermoid cyst, containing long hairs and the nodules of an alveolar carcinoma. The woman recovered, but later another tumor appeared on the right side.—*St. Petersburg Med. Wochenschr.*

EXTIRPATION OF A MYO-FIBROMA OF THE UTERUS PER VAGINAM.

Dr. Mikulicz, of Krakow, reports the following case: The patient, a woman 29 years of age, suffered from hæmorrhages for a year and a half. Intense pains came on afterward, and the patient noticed a tumor over the symphysis. She was of medium size, and very anæmic. By palpation of the abdominal walls a tumor was felt as large as a child's head; per vaginam a tumor of the size of a fist was found situated in the posterior wall of the uterus. The cavity of the uterus reached as high as the navel; and a part of the tumor was imbedded in the cervix. The diagnosis was intramural myoma of the posterior wall of the whole uterus. The operation was performed as follows: The perinæum was dissected down to the sphincter ani, and the greater part of the posterior vaginal wall down to the rectum. The lower part of the tumor was then seized and by two lateral cuts its capsule was entered. The latter was enucleated in the usual way by entering the capsule with blunt instruments and tearing the tumor down with the forceps. The upper part offered considerable resistance, and it was only possible to extirpate the growth in fragments. Then the whole hand entered the cavity of the tumor and the rest was enucleated by the fingers. But there was another subserous tumor intimately connected with the large intramural growth. The uterus was therefore inverted and the rest of the intramural and the whole subserous tumor removed by scissors. The peritoneal wound was sutured by carbomates catgut, which was easily done on the inverted uterus. The sutured part was then washed with a 3 per cent. carbolic solution, and iodoform applied to the wound, the fundus uteri reopened, and three drainage-tubes inserted. The vaginal wall and the

perinour were then sutured with catgut and a compresses applied to the abdomen. There were no febrile nor septic results. After three weeks the patient left the bed, and, in 30 days, the hospital.—*Wiener Med. Wochenschrift*.

HÆMATOMA OF THE PANCREAS.

The patient, 40 years of age, had acquired an acute gastritis, by taking a very hearty meal. A few months after, he noticed a tumor growing in the region of the stomach. Examination showed, between the umbilicus and processus xiphoides, a tumor which was fluctuating and of the size of two fists. The course of the disease did not indicate a sarcoma or an abscess, but a cystic tumor of the pancreas was most probable. The abdominal walls having been dissected the transverse colon was separated from the stomach and a solid cyst laid bare. To the anterior surface of this cyst the parietal peritoneum was affixed by sutures, and in this procedure a dark ink-colored fluid flowed through a deep suture; 1900 c.c. of a similar fluid were removed, and the walls of the cyst split open. The internal surface was smooth; near the colon were some ragged masses. The cavity was washed out and an antiseptic treatment followed. After the first few days, a bloody serum was discharged and some black masses expelled, but the course of the disease was afebrile. The discharged fluid was recognized as altered blood, showing hemine by chemical analysis, and by the spectrum. After a few days an eczema appeared around the wound such as is seen in fistula of the stomach; and the discharged fluid showed all the characteristics of the pancreatic fluid (digesting albumen, forming leucine and tyrosine, and changing amylum into sugar). The patient has at the present time a fistula 3 cm. long and 4 mm. broad, which is probably a receptaculum for the pancreatic fluid, while the ductus is probably closed. The tumor was a hæmatoma of the pancreas.—*Weiner Med. Wochenschrift*.

UNILATERAL ALBUMINAR RETINITIS.

The patient, a soldier, forty-three years of age, entered the hospital with symptoms of profound cachexia. General anasarca, with difficult respiration, and a large amount of albumen in the

urine, indicated the presence of kidney disease. On further examination, it was found that there was but one kidney, which was attacked with parenchymatous nephritis. The patient believed his trouble to have originated from a bilateral epididymitis, and there was in fact an induration of both testicles, with chronic hydro-vaginitis of the right side. The prostate was also indurated in some parts, and generally hypertrophied. To insure the correctness of this diagnosis, the eyes of the patient were examined by the ophthalmoscope. The right eye was perfectly normal, the cornea and lens being clearly transparent, and the choroidea and retina in a healthy condition. The left eye, however, showed all the lesions peculiar to albuminar retinitis. There were two oval plaques of whitish-yellow color situated behind the vessels in the external layers of the retina. The retinal vessels were seen, thus contrasted, even more clearly than usual. The seat of the lesion was doubtless in the granular layer, and of a degenerative character. Another spot, of a blackish-yellow contour, was found on the superior part of the papilla, in the angle formed by the bifurcation of the two ascendant branches of the superior artery, and this spot was produced by fatty degeneration of the external elements of this part of the retina. Visual troubles were at first wanting, but later there were aggravated symptoms, confined to the left side. In the autopsy, the right kidney was found wanting, and the right eye was perfectly normal, while the left kidney was attacked by parenchymatous nephritis, and the left eye by albuminar retinitis.—*Recueil d'Ophthalmologie*.

HEREDITARY SYPHILIS AND RACHITIS.

The lesions of hereditary syphilis and of rachitis are of the same character, the latter being more developed. In hereditary syphilis there is either cutaneous or mucous ulceration, or there are visceral lesions or desquamative syphilis of the tongue. It is always necessary in cases of rachitis to look for cicatrices and defective second dentition. In rachitis there are three principal types of osseous lesions: (1) hard osteophytes; (2) gelatiniform atrophy; (3) spongy tissue or true rachitis. But all cases are not the same. Sometimes rachitis begins in a child of three years, without any other lesions. In the first type the

bones are normal except the ostesphytes which are of considerable size, and situated mostly on the lower half of the humerus and on the internal aspect of the tibia. In the region of the apophysis, there are found one or two spots a millimeter in diameter of a friable chondro-calcareous substance, which is a calcareous infiltration of the cartilage tissue. These lesions are observed in the fœtus and in children up to the sixth week of age. Later there is found gelatiniform atrophy, certain parts of the bone being filled with a yellowish red tissue. The bones of the cranium are often perforated by this mass. On the extremities of the long bones there is sometimes true juxta-epiphyseal luxation, a syphilitic pseudo-paralysis. In the third stage the extremities of the long bones are entirely changed, the tissue being spongiform. Of 100 cases of rachitis, there are found syphilitic lesions in 90, and the other ten have osseous changes only.—*Le Praticien*.

CEREBRO-SPINAL SYPHILIS AND ITS SPECIFIC TREATMENT.

In modern neuro-pathology a knowledge of no diseases has made more rapid progress than that concerning cerebro-spinal syphilis. A good many well observed cases have been reported in the last twenty years. Bouchat found in three months four developed cases. The first patient had all the symptoms of common hemiplegia, resulting from an attack of apoplexy without any nervous troubles and without any other lesion. After taking mercury and iodide of potassium for a few days, the mobility of the limbs returned, and the patient, after a short time, was cured. This patient had, in the first instance, been declared incurable. Another paralytic person, a child one year old, with delirium agitans and epileptiform attacks, accompanied by hemiplegia of the left side of the face and of the extremities, showed suddenly a paralysis of the third pair on the right side; and then the syphilitic origin of the malady was ascertained. This coincidence, namely, the ocular paralysis on the right side and hemiplegia on the left, was of course an indication of bilateral lesions on the base of the brain. The third patient was attacked with epileptiform phenomena without loss of consciousness, and no cephalic pain. This epilepsy was circumscribed by localization

as affecting certain muscles of the face. The patient had frequent vomiting, amblyopia at intervals, and partial loss of memory. By taking iodide of potassium and mercury, the attacks diminished, the vomiting ceased, the voice returned and the memory was restored.—*L' Union Médicale*.

THE TREATMENT OF SIMPLE ULCER OF THE STOMACH.

The good results of treatment of simple ulcer of the stomach with milk diet are well known, but there are persons who cannot digest milk, and some are affected by it so that they take a cup of milk to regulate their bowels. In these persons it will be utterly impossible to give a regular lacteal regimen in the usual way. But the introduction into the stomach by œsophageal tubes changes certain conditions entirely. With the œsophageal tube several quarts of milk have been introduced into the stomach, and it has been retained without trouble. The œsophageal tube suppresses the repeated vomiting, and this artificial alimentation will be tolerated for a long time. The same patient who will begin to vomit when taking the glass of milk into his hand will introduce the œsophageal tube into his stomach and pump in a pint of milk without trouble. To avoid a possible rupture of the ulcer by enforced dilatation of the stomach, it is advisable to introduce not more than a pint at once. The convalescent patient can take from 5 to 6 pints of milk a day. But the introduction of the tube, six times a day would be imprudent, and it is, therefore, advisable to introduce the milk in a concentrated state. Recently the cream of the milk has been reduced to a powder, 120 grm. of which are equal to a pint of milk. This powder can be dissolved in a small quantity of water and introduced into the stomach *ad libitum*.—*L' Union Médicale*.

RETENTION OF A FETAL HEAD IN THE UTERUS FOR FORTY DAYS.

This patient presented herself apparently in full health, and there was nothing noticed about her save an insupportable stench. The pulse ranged from 72 to 78; the tongue was clear; the temperature normal; the appetite good and digestion perfect. She

said that she was delivered of a child, 40 days ago, and that her physician was not able to extract the head as it followed the body, and so cut it off and left her. Examination detected a tumor over the symphysis pubis of the size of a child's head, and the walls of the anteverted uterus gave a crackling sound. Injections into the vagina had been made, and ergot administered without any effect. The cervix was in a normal condition, *i. e.*, contracted to the normal size, while the walls of the body of the uterus containing the foetal head were enlarged, and gave the crackling sound. During all the time a foul smelling fluid came from the uterus. The cervix was dilated with compressed sponges until the application of instruments was possible. Then a polypus forceps was introduced, and the smaller bones removed. The large bones had to be curved into each other and an incision into the cervix had to be made so as to make extraction possible. The patient never had fever and the temperature was normal through and after the operation. The uterus contracted easily, and a few injections removed the remaining fetid fluid.—*Med. Chir. Centralblatt.*

HERNIA OBTURATORIA INCARCERATA, WITH OPERATION AND RECOVERY.

Incarcerated hernia obturatoria is not frequently observed, and the operations for its relief have not been very successful. The following case will, therefore, interest the surgeon. The patient, a lady, 65 years of age, complained of colicky pains and retention of feces with flatus for three days. There was also vomiting and pain in the left lower extremity. The abdomen was tympanitic and the cavity between the adductor longus muscle and the rectus femoris was not as deep as usual. Reposition was not successful. In the region of the foramen ovale there was detected on the next day a small, hard body, and all the other symptoms continuing, hernia obturatoria was diagnosed. An incision was made from the lower margin of the os pubis on the adductor longus, the latter separated, and the pectineus elevated by blunt instruments. Severe hæmorrhage set in. The sac was opened with blunt instruments, but there were some parts on the margin of the sac which were very hard, and whose separation was found to

be very difficult. The intestine was reduced and the wound covered with iodoform and cotton. The wound healed but slowly, the tissue being of unhealthy appearance. The woman recovered entirely.—*Aerztl. Intellig.-Blatt.*

SPONTANEOUS SEPTICÆMIA ORIGINATING FROM EXTRA-PUERPERAL SALPINGO-PERITONITIS.

The patient, 33 years of age, had a chill the day before she entered hospital. Ten years ago she was delivered of a child; and she contracted afterward, by hard work, a prolapsus uteri. She has now some red spots in the face, and she suffers from continued vomiting. There is high fever, pulse 132, exanthema on the chest, and the sphincter and os vesicæ are uncontrollable. The following day the exanthema is of a violet color and more diffuse. There was some cough. The next day some pains in the abdomen; lungs affected; after three days she died. The autopsy showed all the symptoms of septicæmia, suppurative peritonitis, resulting from suppurative salpingitis, bilateral pleuro-pneumonia, nephritis parenchymatosa, and œdema pulmonum. The suppurative peritonitis which induced the septicæmia with resulting death was here caused by the suppurative salpingitis which latter was probably produced by traumatic influence. A puerperal origin is here excluded, the person having not been pregnant for the last ten years. But the rapid course of the disease is similar to that of puerperal peritonitis, and the septic infection had been of an intense character.—*Aerztl. Intelligenzbl.*

MOLLUSCUM FIBROSUM.

The patient, a mariner twenty-four years, has never had syphilis, and was of an exceedingly healthy family. In 1879, while starting on a tour in the West Indies, he noticed some nodes on his hands, some of which grew rapidly. Then they remained as they are now. These nodes are dispersed over the whole body, and while they are more confluent on its anterior surface they are more discrete on the back, and there are but a few on the forearms and legs. On the thorax, they form a group of nodules resembling plums, which are cut through in the middle and giving the surface an undulating aspect. Their consist-

ency differs according to their volume. The large ones are pendulous, and they seemingly contain fluid, the small ones being hard. These tumors are all sessile. The skin retains its color, except at the level of the largest tumors, where it is violet and glabrous. They are composed of fibers of connective tissue.—*Gazette Médicale de Nantes.*

PROLAPSUS OF GASTRIC MUCOUS MEMBRANE THROUGH THE UMBILICUS.

A boy, thirteen years of age, had a reddish tumor of the umbilicus, covered with mucous membrane. The tumor was fastened to the umbilicus by a small pedicle, and it secreted a turbid, sour reacting juice. This secretion was increased by contact, and after meals, when the tumor was larger and more highly colored. Fibrine was dissolved by the sour reacting fluid. The extirpated tumor was microscopically examined, and proved to consist externally of the gastric mucous membrane, and internally of the muscular and serous layer of the stomach. The tumor had been noticed after detachment of the umbilical cord from the child. The prolapsus of the pyloric portion had probably been provoked by a dislocation of the pylorus near the umbilical cord, and the midwife had probably caused the total prolapsus by cutting the umbilical cord too short.—*Deutsche Zeitschr. f. Chirurg.*

PAIN IN RIGHT ILIAC REGION.

A servant girl, 19 years of age, complained of pain in the side and in the region of the right anterior superior spinous process of the ilium, as far as the knee. There was no fever, but slight tenderness on pressure. Warm baths increased the pain, and the faradic current was applied without any result. Then a large magnet was attached and the pain ceased immediately. The same experiment was always followed by the same results, but when the magnet was heated no relief was attained. Then ice was placed on the the painful region, with the same good results, and the author thinks that only the reduction of the temperature on the applied part gave the relief. All the other remedies failing, at last a single hypodermic injection of morphine cured the patient.—*Med. Chir. Centralblatt.*

ENCHONDROMA OF THE PAROTID.

Nusbaum calls attention to the following points: After extirpation of a sarcomatous testicle the parotid is mostly suddenly attacked, and, *vice versa*, after expiration of the parotid, sarcoma of the testicle will appear. In operating on the parotid the pus anserinus ought not to be touched. It is rather advisable to leave a small part of the enchondroma in the tissue, and to operate rather with the fingers than with scissors. The lesion of the facialis is a deleterious accident, resulting in incurable paralysis, with the mouth and the eye of the same side half opened and saliva flowing continuously from the mouth. His Royal Highness Duke of Bavaria, Dr. Carl Theodor, is a very able operator in extirpation of tumors of the parotid.—*Aerztl. Intelligenzbl.*

RETENTION OF PLACENTA; INJECTIONS, FOLLOWED BY DEATH.

An anæmic woman, thirty years of age, entered the hospital under the following circumstances: Two weeks ago, two children were born, and two placenta expelled. But two days afterward a third child was expelled, but the placenta remained. A foetid fluid was discharged after that time. There was tumefaction of the whole genital tract, and the placenta was enclosed by the contracted cervix. The placenta was seized by forceps, but on account of severe hæmorrhage, a tampon was applied. Injections into the vagina and uterus were made. Suddenly she had a high fever, and died three days after. The autopsy showed peritonitis, with a fluid in the abdominal cavity which had entered through the fallopian tube.—*Le Praticien.*

PROLAPSUS RECTI CURED BY A NEW OPERATION.

The general treatment of prolapsus recti is excision of the protruding part and suturing the rectal mucous membrane to the sphincter. Dr. D'Antona has performed with success the following operation on a woman: Seizing the prolapse with four Billroth's pincettes, and forming thus two cylinders of the rectal canal, he introduced one catgut suture into both cylinders and then into the margin of the anus. Another suture is passed through the middle part of one cylinder, carried through the Douglas sac,

and the perirectal tissue, returning to the other cylinder. The patient is discharged, cured in 15 days.—*Il Morgagni*.

PAPILLOMA OF THE BLADDER.

The patient, 43 years of age, has suffered for six months from hæmorrhages through the urethra, with evacuation of tissue corpuscles. By examination per rectum, a tumor on the left side of the bladder was found. For three days after examination there was severe hæmorrhage from the bladder. Entering the bladder through the opened perinæum the introduced finger felt a pedunculated tumor which was detached by torsions with the forceps. The tumor was of the size of a walnut, and it proved to be of benignant character. The patient was discharged entirely cured.—*Archives Générales*.

ECHINOCOCCUS IN THE RIGHT PLEURAL CAVITY.

A boy, 12 years old, was taken sick with symptoms of pleuritis. The right side of the thorax was found to be dilated, and the intercostal spaces enlarged. Respiration was retarded, but there was little albumen in the urine. He had suffered from malaria for a long time. At the autopsy a thick serous fluid was found in the pleural cavity; and in the region of the fifth intercostal space there was an echinococcus cyst containing a clear fluid and many echinococci. The right lung was atrophied and the bronchial tube of the same side reduced to a mere filament.—*Lo Sperimentale*.

ERYTHEMA MULTIFORME AND SYPHILIS.

Prof. Neuman publishes a series of cases in which erythema multiforme and nodosum appeared in syphilitic persons right after or during the treatment of syphilis. These cases seemed to prove that the syphilitic diathesis changed the blood and lymph vessels of these persons so as to provoke erythema. The cases were observed in the same ward and under similar circumstances.—*Med. Chir. Centr. Blatt*.

TIC DE SALAAM.

Tic de salaam, or eclampsia mutans, is of rare occurrence. The attack begins with a certain restlessness, the eyes are then widely

opened and fixed on certain objects. Then the head is suddenly flexed to the thorax, and the upper body bent forward, while the arms are thrown forward. These movements are rapidly executed, and they are repeated from 10 to 30 times. Consciousness is perfect. The disease has hitherto proved incurable.—*Revue Médicale*.

DOUBLE PLACENTA.

After the birth of the child a large placenta with the cord attached was delivered, and the physician naturally thought everything all right. But, half an hour afterward, labor-pains began again, and there was expelled another placenta about half as large as the former, and without a cord. The blood vessels in the cord, as well as in both placentæ, were exceedingly small. Both specimens were presented at a meeting of the Academy at Paris.—*Archives Générales*.

MALARIA IN FLOWER POTS.

Dr. Eichwald, of St. Petersburg, reports the case of a lady who lived constantly in a room filled with flowers in pots, and who thus acquired an intermittent fever with symptoms of true malaria. It is not the smell of the flowers which produces sickness, as generally believed, but the dampness emanating from the earth in the pots. In this case the lady lived in a region absolutely free from malaria and other fevers.—*Med. Chir. Centl. Blatt*.

ON TRANSPLANTATION OF MUSCLES.

After extirpation of a large fibro-sarcoma from the superior part of the biceps brachii muscle a piece of the biceps femoris of a dog was implanted. Three months afterward, the electrical current showed normal behavior of the muscle. The implanted muscle proved to be as irritable as the original, and there was a visible contraction of its entire muscle when the elbow-joint was flexed.—*Petersburg, Med. Wochenschr.*

Selections.

REMARKS ON 177 OPERATIONS FOR ENTROPION AND TRICHIASIS. BY F. C. HOTZ, M. D., Chicago, Ill.

The author of a new operation or of a modification of an old method ought, after a few years, to give a candid report of his experience. If his operation has proven a success, the profession will readily adopt it; if a failure, it is no less important for the profession to know it. But sometimes we do not learn of the results because they have not been very brilliant. For fear, therefore, my silence might be misinterpreted, I wish to give a brief report of the results I attained in the past four years by the operation for entropion and trichiasis published in volume viii, No. 2 of these Archives. And at the same time I wish to supplement my former paper by a few remarks on the operation.

The essential features of my operations are these: The skin of the eyelid is incised transversely in the line of the upper border of the tarsus of the upper lid (or along the lower border of the tarsus of the lower lid); the muscular layer covering that border of the tarsus is excised (about 3 to 4 mm. in width); and the cutaneous edges of the incision are brought in close adaptation with the cartilage by sutures which are passed right through the border of the tarsus and the tarso-orbital fascia.

The success of the operation depends a great deal on the correct incision; it is, therefore, of paramount importance that the surgeon has a clear idea of this point. Now, I have several times seen my incision described as being made 2 mm. above the free border of the eyelid. Nothing could be more erroneous than this statement. Perhaps the error was caused by my saying (*l. c.*, p. 255): "I apply the point of a scalpel at a point 2 mm.

above the inner canthus and draw a horizontal incision across the lid to a point 2 *mm.* above the external canthus." He, of course, who had read the preceding passages with attention, and only looked at the wood-cut accompanying the description, could never get so false a conception; for it was expressly remarked the incision should follow, as closely as possible, that furrow which is the border line between the skin of the eyelid and the supratarsal integument. This furrow (in the upper lid) describes a curve beginning 2 *mm.* above the inner canthus, and ending 2 *mm.* above the outer canthus, but its center is from 6 to 8, and sometimes even 10 *mm.* removed from the cilia. But as the free mobility of the tarsal skin makes it exceedingly difficult to make the curved incision with the desired precision and nicety, I suggested temporarily to change the curve into a straight line: "I seize, between thumb and forefinger, or with a pair of forceps,* the center of the free edge of the lid and draw it downward until the skin is moderately stretched. As both the commissures are fastened to the bones and thus rendered immobile, the center of the lid alone is affected by this traction, the free edge obtains a convexity downward, while the curved furrow which marks the upper border of the cartilage is reduced to a straight horizontal line." In other words, the center of the furrow and the center of the ciliary edge are displaced downward at the same rate, their original distance being uninfluenced by the traction. Consequently, an incision which follows that furrow while temporarily drawn out to a horizontal line, begins and ends 2 *mm.* above the commissures, but its center recedes from the lid border 6, 8 or 10 *mm.*, according to the varying width of the tarsus. This incision sacrifices nothing of the tarsal skin; the lid retains after the operation its original integument, and in consequence thereof its natural appearance and unimpeded movements, so that this operation, judged by its cosmetic effect, may be considered superior to all other procedures.

Some surgeons, I have noticed, make the incision too near the cilia, because they seem still to believe the eversion of the inverted lid requires a strong traction, obtained from the forcibly

*If the eyelashes are too short to offer a good hold to the fingers.

stretched skin. I explained on former occasions why this opinion is wrong and should be dropped, and my numerous operations are the best practical evidence in support of my theory, that a very small force and a slight tension of the skin are sufficient for the cure of entropium, provided the tension proceed from a fixed point, such as the upper border of the tarsus offers.

When the skin of the eyelid is very flaccid and wrinkled, or when the excision of a wedge-shaped piece of cartilage is contemplated, whereby the width of the cartilage would be diminished, only in these cases may the incision be made below the oft-mentioned furrow to avoid having a super-abundance of skin after the operation. But should the incision be made in the furrow and the tarsal skin afterward be found super-abundant, the mistake can easily be rectified by the removal of a narrow strip of skin from the lower border of the wound. At all events, it is better to make a mistake in this rather than in the opposite direction; for if the tarsal skin turns out to be too wide, it can easily be shortened; but if too short, it cannot be lengthened. An evil consequence necessarily resulting from the short-cut skin is the great difficulty of uniting the edge of the tarsal skin with the upper border of the tarsus. Either it cannot be done at all, or only by unduly stretching the skin. In the first instance, the sutures cannot pass through the border of the tarsus at all; and in the second case, the tension being too great, they are likely to cut through prematurely, allowing the abnormally stretched piece of skin to recover its natural state, in which it is wholly insufficient to cover the whole surface of the lid and to unite with the upper border of the cartilage.

Only when the tarsal skin becomes firmly united with the border of the cartilage is the permanent success of the operation insured. In the highest degrees of entropium and trichiasis, with much contraction and incurvation of the tarsus, it is a common occurrence that the upper border is as much curved in as the lower; and the edge we see after removing the muscular layer is not the real upper line of the cartilage, but the angle of incurvation. In order to avoid mistaking the apparent for the real upper border, and to make sure that the sutures hold the real

border, I have adopted the following plan: After the needle has been drawn through the cut edge of the tarsal skin, I prick it into the cartilage near its upper border, and with it lift the lid off from the eyeball far enough to push one prong of a finely-toothed forceps from above downward between the lid and eyeball, while the other prong passes down in front of the cartilage. In this way the upper border of the tarsal cartilage must get between the prongs of the forceps, which hold it so well that the needle can transfix it with the greatest precision and safety at the properly selected point. I have never seen any untoward symptoms arise from this manipulation.

Canthotomy and canthoplasty were often performed in connection with my operation, and in all cases presenting a thickened and contracted tarsus, Streatfield's grooving was combined with the operation. The splitting of the tarsal edge has been discarded as useless; its immediate effect upon the position of the eyelashes is very nice, to be sure, and lasts about as long as the gap in the lid border. When the gap is filled with granulations, the inevitable contraction of the cicatricial tissues will do its work so thoroughly that the gap is contracted to a fine linear scar in the tarsal edge, and the eyelashes, yielding to this traction of the scar, begin to bend down again. The same objection applies to Ammon's and similar incisions made behind and parallel with the tarsal edge into the conjunctival surface of the lid.

And now a few words about the results of my operations. In the space of four years (Sept., 1878, to Oct., 1882,) I have performed 177 operations for entropium and trichiasis, of which 142 were on the upper lid and 35 upon the lower lid. Among the cases there were all sorts and grades of inversion represented. Although I have kept a careful record of all the cases, noting the state of the lids before the operation, the healing process, the result at the time when the patients were discharged, as well as the condition of the lids at subsequent examinations (when such opportunity offered itself), I shall not annoy the readers by statistical tables, but content myself with saying that the results generally have been satisfactory in the highest degree, and that I value the operation the more, the oftener I have performed it.

Among all the 177 cases there was not one in which the operation failed directly. In several cases, I admit, the eyelashes were not everted as much as I expected after the sutures were tied; but upon re-opening the sutures—as I always did under these circumstances—I found the imperfect effect to be due to faulty application of one suture or the other. Either the thread had not passed through the border of the cartilage at all, or only so superficially that it cut through when the knot was tightened. The readjustment of the faulty sutures always had the desired effect upon the position of the cilia. “Haste makes waste” and is not compatible with my operation which will therefore not likely be a great success in the hands of those who can spare but five or ten minutes for a lid operation.

My tables record 12 relapses in 142 operations for entropium of the upper lids. In 3 of the 12 cases partial entropium had occurred near the canthus; these cases belong to the first stage of the operation, when I yet thought the cilia nearest to the canthus could be everted permanently, without the deep sutures, by the removal of small triangles of integument. Since I have dropped this procedure and employed the deep sutures alone, I have not seen a relapse of this kind.

Four other instances of relapse also belong to the initial period of this operation. The lids presented the highest degree of inversion, and very marked incurvation of the cartilage, for which at present I consider grooving an absolute necessity. For the sake of an experiment, however, I did not groove the cartilages of those lids, because I was curious to see how much my method alone, without the aid of other means, could achieve in these worst forms of entropium; and I was gratified to see that even under such unfavorable circumstances, the eyelashes could be turned enough to clear the eyeball without one particle of skin having been excised; but the eversion of the tarsal edge was not complete so as to prevent a relapse. In repeating the operation the tarsi were grooved, and the results obtained which two years later were still perfect.

The eighth case of relapse occurred in a patient suffering from inveterate lues (which fact was not known to us at the time of the operation); the wound healed very imperfectly, and re-opened

after two weeks to reveal extensive ulceration, proceeding from the groove in the tarsus. Relapses 9 and 10 occurred in a young lady who returned to her home in Minnesota ten days after the operation. When she left, the lids were in a very nice condition, but at home (possibly from the severe cold weather in January), the lids became swollen, painful, and extremely sensitive to cold air. This state lasted about four weeks, and when the patient came back to the city her eyelids were still very tender upon pressure and sensitive to cold. It seemed to me that an inflammation and softening of the tarsus had taken place, and that under these circumstances the tarsal edge had again yielded to the traction of the very atrophic conjunctiva. In two instances, finally, the retro-tarsal fold of the conjunctiva was obliterated, and the height of the cartilage reduced to five *mm.* by atrophy of the conjunctiva and cartilage. In such cases the prospect for permanent improvement is very dubious; the fornix being obliterated, the lid is tied down, as it were, to the eyeball, which drags it along in its rotation. This continuous dragging creates chronic irritation and inflammation of the tissues of the eyelid, and in this way leads to further shrinkage of the component parts of the lid.

This extreme shrinkage of conjunctiva and tarsus is a very important factor in the results of the operation upon the lower lid, and has rendered a permanent relief impossible in three cases. In two other cases, however, the relapse must be charged to a faulty application of the sutures. In repeating the operation, it was discovered that the tarsus was unusually broad, and its lower portion was strongly bent inward, so much so, that the angle of the bend had been taken for the lower border of the cartilage, and the sutures been put in the wrong place.

As I could not examine every case at some later period, I can of course, not claim that these seventeen cases represent the actual percentage of relapses; on the contrary, I have no doubt that their number is greater, because I have operated on other cases under the same conditions as those which were followed by relapses. I mentioned the above cases simply to point out some of the influences which can affect the result of the operation, and to show that some of the causes have no particular relation

to the operation I employed, but will have the same bad effect upon the results of any other method. From my whole experience, I dare say that relapses will occur comparatively seldom, provided the operation be done with care and accuracy.

Among my cases there were fourteen upper eyelids upon which other operative methods had been tried for the relief of entropium. In the most cases Arlt's operation had been performed; and it was interesting to observe how seriously the movements of the upper eyelid are impeded by the removal of the tarsal skin, and that the degree of the disturbance stood in close relation to the size of the excised integument. In these cases we must take particular pains to make the incision in a line with the upper border of the tarsus, because after the transverse incision is made, the skin which was stretched and dragged out of place by the previous operation will shrink so much that there will not be enough to cover the whole lid with if the incision be made lower than the upper border of the tarsus. The skin must be dissected off from the tarsus clear down to the eyelashes by dividing all the cicatricial bands connecting the two parts; the cartilage being grooved, the sutures are put in. In this way I succeeded in relieving the entropium as well as in restoring to the eyelid its free and easy movements.

Operations for entropium producing perpendicular scars upon the eyelid are a gross offense against good taste and cosmetic laws, and the sooner they are excluded from the sphere of legitimate surgery the better. Twice I had occasion, in operating for entropium, to relieve the lid of the hideous deformity produced by such perpendicular scars.

With a few exceptions, the after-treatment consisted in the application of wet compresses during the first twenty-four hours; in six cases, borated cotton was used instead. First union was obtained in 140 cases; in thirty-seven cases pus showed itself in the sutures on the second or third day. The constitutional condition of the patients seemed to influence the healing process more than any other cause; among forty-three patients whose constitution was weakened by scrofula, anæmia, malnutrition, etc., suppuration occurred twenty-four times, while among the

134 robust patients the healing was disturbed in seven cases only.

Reviewing the results of my operations after a four-years' trial, I can say that they have well sustained and corroborated my former statement, that this operation possesses the following advantages and meritorious features :

1. That it accomplishes its purpose (relief of entropium) without the slightest destruction of skin.

2. That for this reason it can be employed in cases where other methods are impracticable on account of excessive shortness of the integument of the lid.

3. That it does not mutilate the lid or in any way interfere with its movements.

4. That in a case of relapse it can be repeated without in the least disturbing the natural appearance of the lid.

5. That the tension by which the inverted eyelashes are turned back to their normal position is rendered independent of the movements of the lid, because the distance between the two points upon which the tension is to exert its influence, viz., the upper border of the tarsus and the free edge of the lid, remains the same whether the lid is raised or dropped ; while where the entropium is relieved by the shortening of the integument, the tension is subjected to considerable variations, because it is regulated by the distance of the free edge of the lid from the supra-orbital margin. This distance varies with the movements of the eyelid ; it is greatest when the lid is closed, and therefore in this position of the lid the tension exerts its greatest influence upon the tarsal edge ; but when the lid is raised, its free edge approaches the supra-orbital margin ; consequently, the integument between these two points becomes relaxed, and the tension is greatly diminished, and may even be reduced to zero. Under these circumstances, therefore, the upper lid can appear everted when closed, and inverted when open.—*Archives of Ophthalmology*, December, 1882.

CLINICAL REMARKS ON THE FUNCTIONAL VOMITING OF HYSTERIA. By J. S. BRISTOWE, M.D., F.R.S.

There are few more troublesome affections to deal with than hysterical vomiting, and I suppose that most practitioners of long experience have, at one time or other, been sorely perplexed by cases of the kind. Fortunately, patients seldom die of it, and, even though all kinds of treatment may seem to fail, more or less perfect recovery usually ensues in the long run. I call to mind a few cases which in former years have deeply interested me; especially two, the one, that of a young unmarried woman, a hospital patient, the other that of a lady of mature years, whose hysterical symptoms were induced in the first instance by severe domestic affliction. The younger patient's vomiting dated from a voyage she had made across the Atlantic some time previously to her admission into the hospital. She continued to vomit after everything she swallowed, and came under my care in a state of great debility and emaciation. She remained in the hospital for some time, suffering from what seemed to be extreme irritability of the stomach, which drugs failed to influence, and which was finally benefited, though not cured, by reducing the food administered by the mouth to teaspoonfuls of milk only, and by supplementing these by nutrient enemata. The lady presented many symptoms of aggravated hysteria, besides constant and uncontrollable vomiting coming on immediately after everything that was taken into the stomach. She continued in this state for two or three years, became reduced to the last stage of emaciation and helplessness, and on many occasions appeared to be at the point of death; but she recovered. Some years afterward, having in the interval enjoyed excellent health, she suffered from a recurrence of her malady. In many respects the symptoms were different, but there was a return of the incessant vomiting. She continued in this state for many months, and again she became a living skeleton, and again her life was despaired of. But once more she recovered absolutely; and she remains well. I do not now give these cases in detail, partly because I have said enough about them for my present purpose, but mainly because I hope

on some future occasion to devote a special paper to their consideration.

In the spring of last year, another case of aggravated hysterical vomiting came into the hospital under my care. The patient was a distinctly hysterical young girl, who had been constantly vomiting for about four months, and who had consequently become extremely thin and weak. The abdomen was shrunken, but there was no sign of abdominal disease. Nevertheless, she continued to vomit after admission, exactly as she had vomited before, after everything she swallowed, even if it were only a little water. Various remedies were tried without effect; the food was reduced to milk given in diminishing doses, and ultimately in teaspoonfuls, but still she vomited. Raw meat was then administered, but the result was the same. Then for a week or so nutrient enemata were given to the exclusion of all other food; at the end of which time milk was again tried in minute quantities, and again it was rejected as it had been all along.

The question now for the first time presented itself to my mind, "Was it possible that the girl's vomiting was due, not to irritability of the stomach, but to functional affection of the œsophagus, and that she was being slowly starved simply because no food ever reached the stomach?" There was no doubt whatever that she swallowed the food. On this point the ward-sister and all who had to deal with her were unanimous. Indeed, I had myself watched her in the act of taking food; and further, I now made her swallow some milk in my presence. The act of deglutition was—it always had been—perfectly performed, the mouthful descended into the œsophagus, and thus got out of the sphere of voluntary action; and then, at the end of a minute or two, after appearing to suffer from a great deal of discomfort, she brought it up, as was her custom, without violent straining, but with efforts that fairly well resembled those of vomiting.

The reasons which collectively led me to suspect that her food never reached her stomach were partly personal reasons, and partly reasons derived from experience.

The personal reasons were, that there were never any clear symptoms of indigestion; no uneasiness after food; no flatulent distension, or tendency to eructate; and that, so far as I could

ascertain, she vomited all kinds of food, liquid or solid, equally, no matter how little or how much was taken. It seemed impossible that she could vomit from the stomach, without the most violent effort, the minute portions of milk, iced water, and raw beef which were often administered to her, which nevertheless she did reject (after swallowing) almost without change and almost without effort.

The reasons derived from experience were mainly furnished by three cases which presented themselves to my mind. A spare, middle-aged clergyman, of nervous temperament, and liable to megrim, has been in the habit for several years past of consulting me about his ailments, of which the most important has been a peculiar spasmodic affection of the *œsophagus* (so far as I know quite independent of organic disease of the part), which is apt to attack him at the beginning of a meal, and is usually attended by a painful sense of constriction originating in the lower part of the tube, gasping for breath, and faintness. Now and then, also, he brings up during the night a quantity of mucus, which appears to come from the *œsophagus*. But the special point in his case, which makes me refer to it now, is that some time since he took at night a dose of morphia for the relief of a threatened attack of megrim, without the expected relief, or even sleep, following, until half an hour or so after breakfast next morning, when he became drowsy. He was satisfied that the morphia had lain in his gullet all night, and that it had only been carried into his stomach with his breakfast. His suspicion has since been confirmed; for on several occasions subsequently, his dose of morphia, if it has not been carried on by food taken later, has lain in his *œsophagus* all night without producing any effect, and either it has been regurgitated in the morning, or its effects have followed his natural repast.

The second case was that of a hospital patient of mine, a man over fifty, who had suddenly, about a week before admission, become incapable of swallowing. He had been a healthy man; there was no explanation of his state that I could make out, but he had been wholly without food for a week, and he had consequently become thin, and especially much enfeebled. On making him take food in my presence, I found that he masticated prop-

erly, and that the act of deglutition was performed without difficulty, but that immediately what he had taken was violently ejected. The impediment was clearly in the upper part of the œsophagus. Having failed to detect any lesion by external examination, or by looking down the throat, I proceeded to pass a bougie. There was a very slight impediment at the upper part of the œsophagus, which was overcome without difficulty, and the instrument was pushed on into the stomach. The effect was marvellous; the patient swallowed without the slightest difficulty immediately afterward, and swallowed thenceforth as readily as he had always done up to the time of his illness. He came under my care again six months later for a temporary attack of catarrhal jaundice, from which he recovered in the course of a week or ten days. He had had no recurrence of dysphagia.

The third case was one of painful interest to me, for I failed to recognize its nature, and it is mainly, perhaps solely, to this failure, that his death must be attributed. The patient was a young man, whose illness had commenced six months before I took charge of him, and was attributed by him to his having drunk a pot of beer which irritated his gullet as it passed down. From that time he seems to have had constant sickness after food, and to have vomited from five minutes to half an hour after everything he took. He was very thin and weak when I first saw him, but I was unable to detect any evidence of abdominal disease. I attached very little importance, however, to the attributed origin of his illness, and assumed that, as his vomiting was often (indeed, generally) delayed for some considerable time after the ingestion of food, it was due either to pyloric obstruction, or to some functional disturbance of the stomach referable to disease external to it. In other words, though I never ventured to commit myself as to the exact nature of his malady, I believed that he had chronic organic disease; either chronic ulcer or cancer of the stomach, or disseminated cancer or tubercle. There were obvious and strong reasons against each of these views of his case; still, believing as I did that the vomited matters came from the stomach, I did not see my way to any other explanation, and I never thought of passing a bougie or of feeding him by the œsophagus tube. His vomiting was persistent up to the time of

his death. At the post-mortem examination, his stomach and other abdominal organs were all found to be healthy, and the only lesion discovered was dilatation of the œsophagus, with hypertrophy of its walls. I now naturally attached more importance than I had done to the history which he gave of his illness; I admitted that his dilated and flaccid œsophagus had formed a virtual impediment to the entrance of food into the stomach; I became impressed with the important practical fact that in œsophageal obstruction vomiting may be delayed for half an hour or more, as it is habitually in pyloric stricture; and, above all things, my unfortunate experience taught me the importance, in all obscure cases of persistent vomiting, of not omitting to examine the œsophagus, or to try the effects of injecting food directly into the stomach. The following are the details of this case:

Dilatation of the Esophagus with Persistent Vomiting—Death.—J. B., a gardener's laborer, æt. twenty-four, was admitted into St. Thomas's, under my care, on June 7, 1879.

He was perfectly well (he said) until six months previously, when one day he drank about a pint of beer, which had a bad taste, caused some irritation along the gullet, and made him sick. The next day he had pain and difficulty in swallowing, and vomited after every meal. The vomiting had continued ever since, coming on from five minutes to half an hour or even an hour after ingestion, and induced not only by food, but by iced water and by medicine. He thought, however, that solids were less provocative of sickness than fluids. He had at no time, since the very first, had pain or difficulty in the act of deglutition, but had often suffered more or less pain behind the sternum and extending to the umbilicus, which came on after food and was relieved by vomiting. He had never vomited blood. He had generally had a desire for food, and had suffered only slightly from thirst. The bowels had been much confined. He had had a slight cough on and off for some time, and said that his sputa had occasionally been streaked with blood. He had lost flesh and strength latterly.

He was a thin, delicate-looking man, and patches of dilated vessels in his cheeks added to the unhealthiness of his aspect. His tongue was clean and moist, but rough; his appetite was fair; his bowels constipated. He complained of a slight dry cough;

but on physical examination there was no evidence of disease either of the lungs or of the heart. The respirations were 18; the pulse 120, feeble, small, and regular. The abdomen was soft and flat, and no tumor nor enlargement of any organ nor tenderness was discovered in it. The urine was small in quantity, free from albumen, and its specific gravity was 1028. The temperature was subnormal. There was no œdema of the limbs, and no enlarged glands in any accessible region. The vomit consisted mainly of matters which had been swallowed, and presented no pathological products under the microscope. The motions were solid and of healthy character. He was treated with bismuth and put on milk diet.

It would be tedious, nor would it be instructive, to reproduce the periodical notes that were taken of the patient's case from the time of his admission up to August 25, the day of his death; for, beyond the fact that there were progressive asthenia and emaciation, the symptoms varied but little from week to week.

He was treated dietetically mainly, by milk, and latterly by wine in addition, given in small quantities by the mouth at frequent intervals, and by nutrient enemata administered from two to four times a day. This treatment had the effect apparently of diminishing his sickness from time to time, and even of arresting it occasionally for a day or two; but on the whole the vomiting continued generally after everything he took, and from five minutes to half an hour or so afterward, and at times was severe. The vomit was generally merely what he had swallowed mixed with mucus, but occasionally it was dark and offensive, and had an unpleasant taste. Streaks of blood were observed in it from time to time. He generally complained of pain behind the sternum after swallowing, and occasionally also of pain at the episternal notch, a few inches below the left nipple, or at the umbilicus. It was noted on one or two occasions that the vomit came up without any straining. And, during the earlier part of his residence in hospital, he manifested a desire for food. He complained but little of thirst. His tongue was generally coated and sometimes dry.

The abdomen never became tumid. On the contrary, it got more and more hollow, and was always free from tenderness and

evidence of tumors. Shortly before his death, it was remarked that what appeared to be a narrow, thick-walled tube could be felt extending transversely across the abdomen above the umbilicus, and could be freely moved upward and downward. It was assumed to be the contracted stomach.

The bowels were for the most part confined, but during the latter part of July the patient suffered from diarrhoea.

The daily yield of urine varied from 10 to 18 ounces. Its specific gravity was high, but it was free from albumen and other abnormal matters. At one time he complained of pain and difficulty in passing it.

He suffered more or less from cough during the whole of the time he was under observation, and at times it was very troublesome, and attended with mucous expectoration, which was occasionally streaked with blood. There was never any clear evidence of pulmonary phthisis, but respiration was harsher and the voice resonance louder at the right than at the left apex, and some variable crepitation and rhonchus were observed here and there.

The heart's action was very feeble, and the pulse, which was always small and regular, sank until latterly it was only 52 in the minute.

His temperature never rose above 98.7° , and was almost invariably subnormal. It tended also to sink from the time of his admission to the day of his death. During July it ranged for the most part between 97° and 94° in the axilla. In August it sank still lower, and before his death fell to 92.8° . Latterly, also, he complained much of cold, and his hands and feet became cold and livid; occasionally he perspired. There was a uniform loss of body-weight from first to last. He weighed 8 stone 3 pounds when he first came into the hospital. He weighed only 5 stone 9 pounds on August 16. He was often very low-spirited during his illness, and was apt to cry; and shortly before his death he was occasionally delirious. He was conscious, however, to the last.

Autopsy.—The oesophagus was much dilated throughout its entire length, and full of fluid. It measured five inches in circumference at its upper part, and three inches just above the cardia. There was no stricture. The muscular coat was hyper-

trophied. The mucous membrane was thickened, generally pale, but presenting a few injected vessels, and thickly studded throughout its whole length with shallow circular pits, which appeared to correspond to dilated mucous follicles.

The stomach was much contracted, and its mucous membrane presented a few patches of congestion. The intestines were contracted and healthy. All the other abdominal viscera and the peritoneum were free from disease.

The lungs were congested, and the base of the right one was collapsed; otherwise they were healthy. Heart healthy.

The lessons applicable to my hysterical patient, which these three cases taught, were that vomiting from the œsophagus might simulate vomiting from the stomach; that œsophageal spasm might form a persistent obstacle to the passage of food; and that small quantities of alimentary or other matters might fail to excite the proper peristaltic movements of even the healthy gullet, and that hence the feeding of patients with teaspoonfuls of food, as is done in cases of irritable stomach, might fail both to impart nourishment and to throw any light on the condition of the patient's stomach.

The results of my experiment will appear in the narrative which I now proceed to give.

*Hysterical Vomiting.** *Cure.*—A delicate-looking girl, fourteen years of age was received into one of my beds in St. Thomas's on September 21, 1881. She was suffering, we were told, from an hysterical affection of the right hip, which first showed itself in July, 1879, and which had continued without cessation, but with varying severity, up to the date of her admission. It did not appear that she had ever before suffered from serious illness; she had never had fits; she had never been hysterical (in the popular sense of the term); the catamenia had not appeared.

At the time mentioned she fell into a state of languor and weakness, and the right hip became very painful—the pain running down the front of the thigh, and extending into the knee. The pain increased in severity until October, at which time she limped in walking, and only put her toes to the ground. This condition

* An almost identical case of œsophageal spasm, only in a young boy, is recorded by Mr. Hulke. *Clinical Soc. Trans.*, Vol. VI.

continued without change to the end of the year, when some improvement took place, which was maintained during the greater part of 1880. In the autumn of that year her symptoms became much aggravated; she seems to have had considerable lumbar pain, and is said to have had sciatica. She then took to her bed, and never left it till July, 1881. There was no improvement, however, after this time, and she was at about her worst when I first saw her.

Then she complained of some pain in the back, but mainly she suffered with her hip. The joint was slightly flexed, and when she attempted to walk (which she did unwillingly, and only with assistance) the right lower limb was kept bent at the hip and knee joints, and she limped, but she planted her foot flat upon the ground. The joint was excessively tender, especially behind the greater trochanter, but there was no swelling, redness, or increase of temperature, and it was distinctly observed that she complained no more when the joint-surfaces were pressed against one another, or when the ligaments were stretched, than she did when the skin was simply touched. There was some rigidity about the joint, but no wasting of muscles. There was nowhere any loss of sensation or of the tendon reflexes, but the superficial reflexes were feeble. The affection had been regarded as hysterical, prior to admission, and in this opinion I and others who saw her in the hospital concurred. While under treatment, she manifested a tendency to sob at times, and the condition of her hip varied a good deal, but she left apparently much improved, on December 10.

She was re-admitted on May 15, 1882. It appeared that, soon after she left the hospital, she began to vomit after food, and before long, after everything she took, the sickness coming on immediately; that she rapidly lost flesh and strength; and that, although the hip-affection remained, it formed a less prominent subject of complaint than it had done previously.

She was much emaciated (weighing only 3 stone 3½ pounds), very feeble, and confined to bed; her cheeks were a little flushed, and her face (which rarely varied) wore a mixed expression of apathy and martyr-like resignation; her skin was dry; her pulse feeble and slow; her temperature normal. She vomited after

everything she took; her bowels were constipated; her urinary secretion was normal; she had no abdominal pain. The belly was hollow, and presented neither tenderness nor lump. The catamenia had not appeared. Her hip was tender, and the joint was kept partly flexed, but she complained of it much less than when she was in the hospital last.

From the first she continued to vomit after whatever was taken; the vomit consisting mainly of the food swallowed and mucus, and the sickness generally coming on a few minutes after ingestion. It was sometimes, however, delayed for ten minutes or a quarter of an hour. It appeared, nevertheless, that a small proportion of her food was retained. After a day or two's experience, she was ordered to take a dessertspoonful of milk only every half-hour, which she vomited. The quantity was then reduced to a teaspoonful, which she likewise vomited; but at the same time nutrient enemata were directed to be administered twice daily. As the vomiting continued without abatement after every kind of fluid swallowed, no matter what its bulk, it was determined to make a trial of small quantities of solid food, frequently given. Pounded raw beef, mixed with currant jelly, was selected, of which she took a teaspoonful at a time. This, however, returned as everything else had returned. A fortnight after admission (the rejection of food continuing unabated) it was determined for a few days to give the stomach entire rest, and to feed her solely with nutrient enemata, of which at first three, and subsequently five, were given daily. She was treated thus for about ten days, and during this time vomited only after taking medicine, which was consequently discontinued after a day or two. During the latter period no particular change was observed in her condition; she presented the same manner and appearance as on admission; she complained of no pain excepting in her back and right hip; she was generally very restless and sleepless at night; she had no desire for food or drink; she did not feel sick; her bowels were confined; her temperature was generally subnormal, as it had been nearly ever since admission, and often sank to 96° ; her pulse, which was extremely feeble, ranged between 42 and 60. She had lost only one pound in weight in a little more than three weeks.

At the end of this time the administration of milk in teaspoonful doses was recommenced—at first only three or four times a day, and then every hour. But again we were disappointed, for after every dose of milk, milk was speedily vomited. In fact, her stomach appeared to be just as irritable now as it had been at first. After a day or two, a grain of opium in the form of a pill was given two or three times a day; but this treatment had no effect. The administration of milk by the mouth was persisted in for four or five days, at the end of which time, feeling a good deal puzzled and disheartened, I gave more serious thought to the incidents of her case than I had previously done, and discussed them fully with my class. I had hitherto assumed that she was suffering from extreme irritability of the stomach, and that it was this irritability which caused her to vomit constantly. But I now called to mind that she had never complained of actual pain or tenderness in the region of the stomach; that she was not flatulent; that her vomiting was an easy process with her; and especially that she brought back the greater part of the minutest quantities of food taken, and in whatever form it was taken. And I asked myself the question, “Was it possible that the bulk of her food never entered the stomach at all, but was retained in the œsophagus and thence regurgitated?” I had other reasons, which I have already fully explained, which helped to suggest this question, and inclined me to answer it in the affirmative. I now made the girl swallow a dessertspoonful of milk in my presence, and watched the progress of events. She swallowed it without difficulty, and it evidently went beyond the influence of the pharynx; then she appeared to suffer from some discomfort, and in the course of a minute or so, without any very violent effort, but with a certain amount of spasmodic action, the milk was gulped up into the mouth.

I then (on June 11) got Mr. Pitts, the resident assistant surgeon, to see the patient with me. And at my request, and in my presence, he passed a medium-sized India-rubber tube along the œsophagus into the stomach, and then injected into that organ about three ounces of milk. There was a little impediment to the passage of the instrument in the lower part of the tube; but it was readily overcome, and evidently was not due to any organic

disease. The milk thus injected did not cause any feeling of sickness, and remained in the stomach without causing discomfort. She did, immediately after the removal of the tube, regurgitate a small quantity of milk, but this was clearly only the milk which escaped into the œsophagus during the withdrawal of the instrument.

It was intended to feed her daily by the tube, but she never required it again during her stay in the hospital. For the next day or two she took milk in small quantities, returning a little of it only occasionally. Two days after the use of the tube, she began to take a tablespoonful of milk every hour, which she retained. The next day a teacupful of milk, with a little tea in it to give it flavor, was ordered to be given several times a day instead, and a little bread and butter was added. These also were retained. The next day her allowance of food was increased by a small quantity of custard-pudding; and thus by degrees her diet was improved in quality and increased in quantity, until, at the end of two or three weeks (or about June 28), she was taking daily a fair quantity of milk, together with two eggs, fish, pudding, and bread and butter. The nutrient enemata, however, were persisted in for a day or two longer, and were then discontinued, partly because their more nutritive ingredients had been withdrawn for administration by the mouth, partly because the bowels, which had hitherto been constipated, became loose. The diarrhœa troubled her for about a fortnight, and had to be treated by astringents. But she continued to take food in increasing quantities up to the time of her leaving the hospital.

It must be observed that the patient to the last appeared to have no desire for food, and to derive no pleasure or comfort from taking it. She took it only because she was compelled; but she took it without difficulty or discomfort. Only on one or two occasions did she vomit any of it. She did not gain flesh very appreciably, and in fact, when she left only weighed two pounds more than she had done on admission, and three more than at her period of greatest enfeeblement and emaciation. The continued diarrhœa may, to some extent, have retarded her progress in this particular, but in other respects the improvement, if slow, was marked; she certainly grew stronger and more cheerful, and her

aspect and complexion assumed the characters of health. Moreover, her temperature, which for the greater part of her stay in the hospital had ranged between 95° and 98° , during the last few weeks seldom fell below 97° , and generally varied between one or two tenths of a degree above 98° and one or two tenths below it. The pulse was generally very slow throughout her illness, varying perhaps between 40 and 60, but latterly it rose occasionally to 70 or 80.

She left the hospital on July 29, cured of the vomiting, and generally benefited in health, but not so much benefited as I could have wished. The fact is, she fretted so much, and so persistently, to go home, that at length, fearing her constant fretting might be retarding her convalescence, I reluctantly complied with her wish. It was clear, however, that though she was thus cured of one important outcome of her hysterical condition, the fundamental malady still remained. The hip-joint continued painful, and I was scarcely surprised to hear that, a month or two later, during my absence from town, there had been a recurrence of the vomiting, and that her mother had brought her to the hospital to have the œsophagus tube re-introduced.

I have little to add by way of comment. There is no doubt, of course, that in most cases of hysterical vomiting, it is the stomach that rejects the food. But it is obvious that in an undetermined minority of cases of such vomiting, of which my case is an example, it is the œsophagus rather than the stomach that is in fault, and if, in such cases, the irritability or spasm of the gullet can only be overcome, and the food swallowed be allowed to reach its destination, the vomiting will cease. If one has reason to suspect the latter condition to be the cause of the patient's symptoms, it is fortunately easy to put the question beyond doubt by having recourse to the œsophagus-tube or stomach-pump; and, if the answer be in the affirmative, to cure the patient of her malady by the repeated use of the instrument and artificial feeding. There is reason, however, to hope that a single introduction may suffice to effect a more or less permanent cure.

How often one has reason to wish that the past, with its misapprehended experience, could be recalled! I have often thought,

since I learnt the lesson which my hysterical girl taught me, that the two cases which I quoted at the beginning of my paper were cases of the same kind as hers, and might have been cured with comparative ease and rapidity.—*Practitioner*.

LOCOMOTOR ATAXY.

Dr. H. C. Tweedy read a paper on two cases of locomotor ataxy, and exhibited the patients. The first case was that of a pensioner, æt. 64, who was admitted into Stevens' Hospital in 1871, presenting most of the symptoms of the affection—the peculiar gait, the absence of co-ordination and of the neuralgic pains characteristic of the earlier stages of the disease. He was persistently treated with nitrate of silver, in doses of $\frac{1}{3}$ gr. three times daily, and continued the use of the drug at intervals for nearly twelve years, during which time he was again in the hospital during the years 1873–76–82. The ataxic symptoms had completely disappeared, but from the length of time the silver had been taken the patient had become argyrised. Attention was invited to the peculiar leaden discoloration of the skin from this cause, and the opinion of the members was requested as to whether the symptoms clearly indicated a case of tabes dorsalis, or one of those rare cases in which the progress of the disease had been arrested, and a cure had followed, whether spontaneously or the result of the remedy employed. The second case was that of an engine-driver, æt. 42, in whom the disease was only of six months' standing. This patient also exhibited most of the phenomena of the earlier stage of the disease, the peculiar gait, and fulgurant pains along the course of certain nerves; but in addition there were consecutive attacks of a cutaneous eruption resembling erythema, entirely confined to the left side of the body, and unaccompanied by any of the usually attendant neuralgic pains. There was also a patch of an eruption resembling psoriasis on the back of the left wrist; no similar patch co-existing on the opposite side. Attention was drawn to the fact of eruptions, usually bilateral, appearing only on one side of the

body, the connection between these and similar eruptions occurring as trophic lesions in tabes dorsalis, but accompanied invariably by lancinating pain along the course of the nerves over which the eruptions were found.

Dr. Banks, having seen a great many cases of locomotor ataxy, was of opinion that in a considerable number the disease stood still, and in others appeared to be removed. He had used nitrate of silver with great advantage, and did not participate in the terror some had of its effects in producing discoloration of the skin. He had once seen it occur in a case of epilepsy. He believed in the existence of a syphilitic taint in a large proportion of cases.

Dr. Grimshaw remembered the case brought forward by Dr. Tweedy. The result of the treatment was admirable.

Dr. Nixon agreed with Dr. Banks as to the frequency of arrest, and even occasional cure, of the disease, especially in cases in which syphilis existed. He considered the skin affections in one of Dr. Tweedy's cases as coincidences, and preferred referring them to a syphilitic origin.

Dr. Robinson asked whether either of the patients was addicted to the abuse of stimulants.

Mr. Lentaigue mentioned a case in which Langenbeck stretched the sciatic nerve, and the symptoms disappeared. A subsequent autopsy showed the spinal cord to be perfectly healthy.

The President related a case of syphilitic origin which recovered under the use of KI.

Dr. Henry Kennedy and Dr. W. G. Smith also took part in the discussion.

Dr. Tweedy, in replying, said that in the case which had recovered, the man had no syphilitic history. Neither patient had been addicted to intemperance.—*Medical Press*.

THE county commissioners have appointed Dr. Wm. T. Belfield Assistant Pathologist at the Cook County Hospital.

Two members of the homœopathic staff have been invited to resign, and their places filled by other similia.

Items.

AMERICAN MEDICAL ASSOCIATION.

The Thirty-fourth Annual Session will be held in Cleveland, Ohio, on Tuesday, Wednesday, Thursday and Friday, June 5, 6, 7, 8, 1883, commencing on Tuesday, at 11 A. M.

"The delegates shall receive their appointment from permanently organized State Medical Societies, and such County and District Medical Societies as are recognized by *representation in their respective State Societies*, and from the Medical Department of the Army and Navy, and the Marine Hospital service of the United States.

"Each State, County and District Medical Society entitled to representation shall have the privilege of sending to the Association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number: *Provided*, however, that the number of delegates for any particular State, territory, county, city or town shall not exceed the ratio of one in ten of the resident physicians who may have signed the Code of Ethics of the Association."

Secretaries of Medical Societies as above designated are earnestly requested to forward, *at once*, lists of their delegates.

Also, that the Permanent Secretary may be enabled to erase from the roll the names of those who have forfeited their membership, the Secretaries *are, by special resolution*, requested to send to him annually a corrected list of the membership of their respective societies.

SECTIONS.

"The Chairmen of the several Sections shall prepare and read, in the general sessions of the Association, papers on the

advances and discoveries of the past year in the branches of science included in their respective Sections. * * *”—*By-Laws*, Art. 11, Sect. 4.

Practice of Medicine, Materia Medica, and Physiology—Dr. J. H. Hollister, Chicago, Ill., Chairman; Dr. J. G. Lee, Philadelphia, Secretary.

Obstetrics and Diseases of Women and Children—Dr. J. K. Bartlett, Milwaukee, Wis., Chairman; Dr. G. A. Moses, St. Louis, Mo., Secretary.

Surgery and Anatomy—Dr. W. F. Peck, Davenport, Iowa, Chairman; Dr. P. F. Eve, Nashville, Tenn., Secretary.

State Medicine—Dr. Foster Pratt, Kalamazoo, Mich., Chairman; Dr. T. L. Neal, Dayton, Ohio, Secretary.

Ophthalmology, Otology and Laryngology—Dr. A. W. Calhoun, Atlanta, Ga., Chairman; Dr. Carl Seiler, Philadelphia, Secretary.

Diseases of Children—Dr. R. F. Blount, Wabash, Ind., Chairman; Dr. J. H. Sears, Waco, Texas, Secretary.

Oral and Dental Surgery—Dr. D. H. Goodwillie, New York City, Chairman; Dr. T. W. Brophy, Chicago, Ill., Secretary.

A member desiring to read a paper before any Section should forward the paper, or its *title* and *length* (not to exceed twenty minutes in reading), to the Chairman of the Committee on Arrangements at least one month before the meeting.—*By-Laws*.

Committee of Arrangements—Dr. X. C. Scott, 393 Euclid Avenue, Cleveland, Ohio, Chairman.

Amendments to the Constitution—Offered by Dr. N. S. Smith, Dakota:

“To provide for the admission to membership of two delegates from the Medical Bureau of the United States Indian Service, to be nominated by the Surgeon-in-Chief of the Bureau, and approved by the Secretary of the Interior.”

Offered by Dr. J. M. Toner, D. C.:

“That the office of Permanent Secretary be vacated, and that the Nominating Committee hereafter annually nominate a Secretary who will serve without compensation.”

Offered by Dr. F. Pratt, Mich.:

“That the law requiring the nominations for officers to be made

from those members present at the annual meeting, shall apply only to the President, Vice-Presidents, Chairmen and Secretaries of Sections, the Assistant Secretary, the Chairman of the Committee of Arrangements, and the Judicial Council."

Offered by Dr. J. M. Keller, Ark. :

"To permit the holding of the annual meeting as late as the first Tuesday of September, if desirable."

Offered by Dr. J. H. Sears, Ark. :

"That the Chairman and Secretary of each Section may add any number of earnest workers to their Sections, in addition to those named by the Nominating Committee, and that the Librarian be made a permanent officer."

Amendments to the By-Laws—Offered by Dr. J. W. Smith, Iowa. Art. II. Sect. 8. Permanent Members : strike out the words "but without the right of voting."

WM. B. ATKINSON, M. D.

Permanent Secretary.

Philadelphia, 1400 Pine st., S. W. cor. Broad.

COOK COUNTY HOSPITAL. Reported by DR. E. P. DAVIS.

The interesting operations of the hospital surgeons during the six weeks ending May 15 have been as follows :

Two secondary amputations of the thigh after excision of the knee joint; in one case the primary operation was defeated by secondary hæmorrhage, which necessitated turning back the flaps and the application of styptics; in the other case, that of a child, sinuses were left which refused to close. In both cases, marked improvement followed the second operation.

Amputation of the thigh for rupture of the popliteal artery. The patient, a middle-aged woman, was admitted with distension of the knee joint with pus; limb flexed at right angles and not ankylosed; a history of rigors and sweats. As soon as possible, an attempt was made to straighten the limb and drain the joint freely. Under the exercise of very moderate force, the popliteal artery ruptured. Amputation was immediately performed. The severed joint was found extensively eroded, while pus had bur-

rowed below the knee. Although the tissues above the knee were much impaired in nutrition, the patient's progress has been unexpectedly good.

A large cyst of the parovarium was removed from a woman of middle age. A diagnosis of ovarian cyst was made, but the real nature of the case became apparent on opening the abdomen. To remove the tumor, an extensive dissection of the peritoneum was necessary. A pedicle was made, and cauterized with thermocautery. Silk and catgut were used as ligatures, and antiseptic precautions observed. A drainage tube was introduced, and the external wound closed with silk. Death from shock followed three days after the operation. A post-mortem revealed no peritonitis and no hæmorrhage; union of the external wound with inconsiderable suppuration. The application of heat by means of the passage of water through flexible metal tubing, coiled to fit the abdomen, was employed with good results during the case.

An adult male was admitted with an injury to the hip joint, produced by falling backward from a fence about twenty feet. A diagnosis of dislocation into the thyroid foramen was made, crepitus indicating some injury to the acetabulum. Reduction was effected by manipulation without difficulty.

A large epithelioma, involving the entire cheek and chin, and also the inferior maxilla, was removed, and a portion of the jaw at the symphysis exsected. The floor of the mouth was exposed, the submaxillary and sublingual glands removed, and involved lymphatics. Free dissection of the alveolar tissues enabled the operator to close the wound with plastic pins; iodoform was used freely in dressing. The recent occurrence of the operation does not indicate the result at present. The patient's constitution is good.

THE Prospectus of the journal of the American Medical Association will be found on another page. It is understood that its editor will be Dr. N. S. Davis, of Chicago, and that the journal will be published in the same city. This adds a most important influence towards elevating the medical standard of the Mississippi Valley and of the West. But with such a trust in our

hands goes also a certain responsibility. If the profession of this part of the nation are wise, they will lend their support in every possible way, not only to this, but to every one of their respectable home journals. In no other way can the medical centers of the West hope to secure for themselves what justly belongs to them. Every year a large number of very valuable contributions, produced by Western men, is sent to Eastern journals. Clearly such a course helps to build up the medical centers of the East, by giving to them what naturally belongs to the West. It has long been a mystery why men who could directly profit by the development of their own sections, as medical centers, are constantly adding to the attractions of distant cities, and to the advantage of those there practicing. It is not denied that whatever adds to the strength of a medical center draws patients to that center, and it follows that when a good, original contribution is sent to New York or Philadelphia, from Chicago or St. Louis, the writer, by his influence, sends, indirectly, with that contribution, valuable professional business that would otherwise more naturally be attracted to his own field. If our medical authors would consider their own interests a little more, and be governed a little less by the traditions of the past, traditions which no longer need apply, they must certainly see that they have not properly appreciated their own opportunities. The *Review* is not asking for itself. It has no grievance, but it would take this occasion to ask in behalf of the new enterprise the hearty co-operation of the whole profession. The Association journal starts with fortunate prospects. Its editor has been well chosen. No man in the profession has done more honest, hard, downright telling work. He now does the profession a favor in undertaking the management of this journal. Its establishment in our midst is a compliment to ourselves. Let us deserve the compliment.—*The Weekly Medical Review*.

BANQUET AT THE ACADEMY OF MEDICINE.—After the addresses of the retiring and incoming presidents (which were received with great fortitude) the members and invited victims enjoyed the following menu:—

SOUP.

Vermicelli, Mutton-Broth, Oatmeal Gruel, St. Ignatius' Bean Soup, Pea-Soup (Alkaline reaction).

FISH.

Cod, with Whale Oil; Morrhuæ Salad, Cat, with Caper Sauce, Dog-Fish, Star-Fish.

MEATS.

Nutmeg Liver, Amyloid Kidney, Fatty Heart, Spleen (*Ad Libitum*).

RELISHES.

Pepsin, Ingluvin, Hydro-Piper, Mustard Plasters, Salts, (Glaubers and Epsom), Vinegar (*Acetum Opii*).

WINE AND LIQUORS.

Vin Ferri, Vin Colchici, V. Aloes, V. Antimon., Liquor Potass., Liq. Arsen., Gin-Seng.

FRUITS.

Adam's Apples, May Apples, Apples of Sodom, Apples of Discord, Apples of the Eye. Nuts—Arom, Brazilian, Butternuts, Strych. Nux Vom.

ICES.

Cold Cream, Camphor Ice, Ice (Bags to the Spine).

CONFECTIONS.

Sugar Coated Pills, Tamarinds, Tropic Fruit, Chlor. Potass. Lozenges, Bronchial Troches.

DRINKS.

Sage-Tea, Bone-Set-Tea, Chamomile Tea, Whey, Coffee, with Glucose; Sugar of Milk, Sugar of Lead, Milk of Assafoetida, Condensed Milk, Goat's Milk, Cowmiss, Cream of Tartar.

Guests will be waited on by experienced nurses.—*The Cincinnati Lancet and Clinic*.

IS IT TRUE? HAS THE ILLINOIS STATE BOARD OF HEALTH UNCONDITIONALLY SURRENDERED TO COLUMBUS MEDICAL COLLEGE?—Such is the announcement made by *Gaillard's Medical*

Weekly. In October, Dr. Rauch, Secretary of the Illinois Board of Health, requested a formal communication from the West Virginia State Board of Health, giving its action respecting the Columbus Medical College. It was understood that it would sustain the West Virginia Board. But meantime a nephew of Dr. J. W. Hamilton, the owner of Columbus Medical College, had become governor of the State of Illinois. The Illinois State Board of Health has not sustained the West Virginia Board. By default, it recognizes the college which granted a diploma to a man after three weeks attendance upon a lecture course. Is this a stand that promises a higher medical education? Is this the Board which is to sweep Illinois free from uneducated doctors? Is three weeks lecture attendance sufficient to constitute a regular medical course? Alas, the times! the customs! It looks as if the owner of Columbus Medical College fixed his nephew, the governor of Illinois, so that the Illinois State Board dared not to peep against Columbus Medical College. Against little colleges which have little or no influence in the political circles regulating the appointing power of the Illinois State Board of Health, we may expect fulminations of excommunication, but the rest may do as they please. Such seems to be the lesson of the past, as regards this Board, and so it will be till the end of time. Political power regulating the practice of medicine is useless unless the people are themselves so educated that they can do their own regulating. Then State boards will not be needed. We are very sorry that the "back-bone" of the Illinois Board has proved to be "mush" against a really powerful and dangerous adversary. In fact, we hope that in some manner it may be shown that the whole affair is a myth and that the Board will sustain the action of the West Virginia Board. If not, the days of usefulness of the Board are ended.

THE PHILADELPHIA HOSPITAL FOR SKIN DISEASES, No. 923
Locust street, Philadelphia, Pa.

BOARD OF MANAGERS.—Robert E. Rogers, M. D.; Wm. H. Pancoast, M. D.; Rev. Geo. F. Wiswell, D. D.; C. W. McKeehan, Esq.; Geo. W. Fairman, Esq.; Hon. A. K. McClure;

Wm. S. Janney, M. D.; Wm. B. Atkinson, M. D.; Lawrence Wolff, M. D.; Geo. H. Brown, Esq. L. Wolff, M. D., Secretary.

ANNOUNCEMENT.

The Board of Managers of the Hospital for Skin Diseases, of Philadelphia, take pleasure in announcing that they have recently added to their facilities a complete system of baths for the general and specific treatment of this class of affections. Under this head are comprised the Turkish, Russian, vapor, medicated and electric baths, for the giving of which the latest and most approved apparatus has been obtained at considerable cost. The subject of balneology, as connected with skin diseases, is receiving much attention from specialists, and the physician in charge of the hospital is giving it the consideration that the importance of the subject demands. Peculiar advantages are thus afforded physicians and advanced students who wish to obtain a knowledge of this branch of therapeutics by visiting the hospital and consulting with the attending physician.

Free clinics are given at the hospital daily, at 11:30 a. m., by the physician in charge, Dr. John V. Shoemaker, where can be seen a great variety of diseases. The large variety of cases presented enable those who attend the clinics to gain in one or two courses a practical knowledge not obtainable in private practice. The course is made more comprehensive by didactic lectures which are delivered at the hospital on Mondays and Fridays, at 11 o'clock, A. M.

The dispensary is open for the reception of patients daily, Sundays excepted, at 11:30 A. M. Physicians and advanced medical students are always welcome, either as visitors or for the purpose of attending the free clinics. The superintendent, Mr. F. C. Waterman, will be in his office in the hospital every day from 11:30 A. M., to 2 A. M., to receive visitors or to transact business.

The following letter explains itself:

CLEVELAND, O., MAY 8, 1883.

MESSRS. EDITORS:—The next annual meeting of the American Medical Association will be held in this city, June 5th to

8th, inclusive. All railroads west of Pittsburg, Salamanca and Buffalo, east of Chicago and south of Cleveland, will carry delegates and members of their families to Cleveland at one full fare, and return them on certificate signed by me as chairman of the committee (certifying that they have been in attendance at the meeting of the Association) at one cent per mile.

The trunk lines east of Buffalo, Salamanca and Pittsburg, have refused to make any reduction. The rates per diem at the hotels will be: Kennard House, \$3; Weddell House, \$3; Forest City House, \$2.50 to \$3; American House, \$2.50; Hawley House, \$2; Striebinger House, \$2; Clarendon House, \$2, and Prospect House, \$2.

X. C. SCOTT,

Chairman Committee of Arrangements.

THE city Health Department reports for the month of April a mortality of 922. The highest numbers of causes reported as follows:

Phthisis pulmonalis, 93; pneumonia, 78; bronchitis, 53; diphtheria, 48; scarlet fever, 36; typhoid fever, 16; enteritis, 17; diseases of the heart, 31; infantile convulsions, 51; cerebral meningitis, 28; puerperal peritonitis, 4; peritonitis, 11; senile debility, 23; congenital debility, 20; still births reported, 64; 7 deaths from small-pox. Deaths under 5 years, 440; under 1 year, 209.

Comparative mortality. April, 1882, 1003; March, 1883, 968; April, 1883, 922.

Range of temperature, 28.3 to 78.3.

THAT quacks cannot be held in damages for malpractice is sustained by the following decision of an Oriental court. A fellow had a pain in his eyes, and went to a farrier, saying, "Give me medicine." The farrier applied to his eyes the remedies he was in the habit of using for his animals, and blinded him, on which he complained to the magistrate, who pronounced that he could not recover damages; "For," said he, "if this fellow had not been an ass, he would not have consulted a farrier."

FRIEDERICH thinks that in hysterical persons who practice masturbation, the clitoris is irritated by this manipulation and

that the reflex symptoms, as convulsions, etc., are thereby produced. He has applied the nitrate of silver to the inflamed clitoris, and seen many cases where all severe symptoms were relieved after a few applications. He thinks further that the gynæcologist should not treat the uterine tract in hysterical persons, there being mostly no pathological phenomena.—*Memorabilien*.

PROF. JNO. E. OWENS has resigned the chair of Surgery in the Woman's Medical College.

At a meeting of the Faculty of the Woman's Medical College, held at the Sherman House, May 17, Prof. D. W. Graham was elected to the chair of Surgery; Dr. Walter L. Dorland to the chair of *Materia Medica* and Therapeutics, and Dr. M. E. Bates to the lectureship of Anatomy.

PROF. T. DAVIS FITCH, of the Woman's Medical College, has been created Emeritus Professor of Gynæcology in that institution. His many friends will be pleased to hear of his satisfactory progress toward recovery, and his ability to again resume his practice.

Prof. M. J. Mergler has been elected associate Professor of Gynæcology.

BEGINNING with the first number of the tenth volume, issued May 3, the *Maryland Medical Journal* was changed to a weekly publication, and will appear every Thursday. Each number will contain sixteen pages, double column, of solid reading matter. The size and appearance of the *Journal* will be slightly altered to conform to the requirements of a weekly.

TREATMENT OF GRANULAR CONJUNCTIVITIS BY SEQUERITI.

Sequeriti is universally applied in diseases of the eye in Brazil. The remedy has been tried in Paris with apparently good results. The seeds of the plants are boiled in water (1:100), and the inflamed lids washed with the solution three times a day.—*Le Praticien*.

